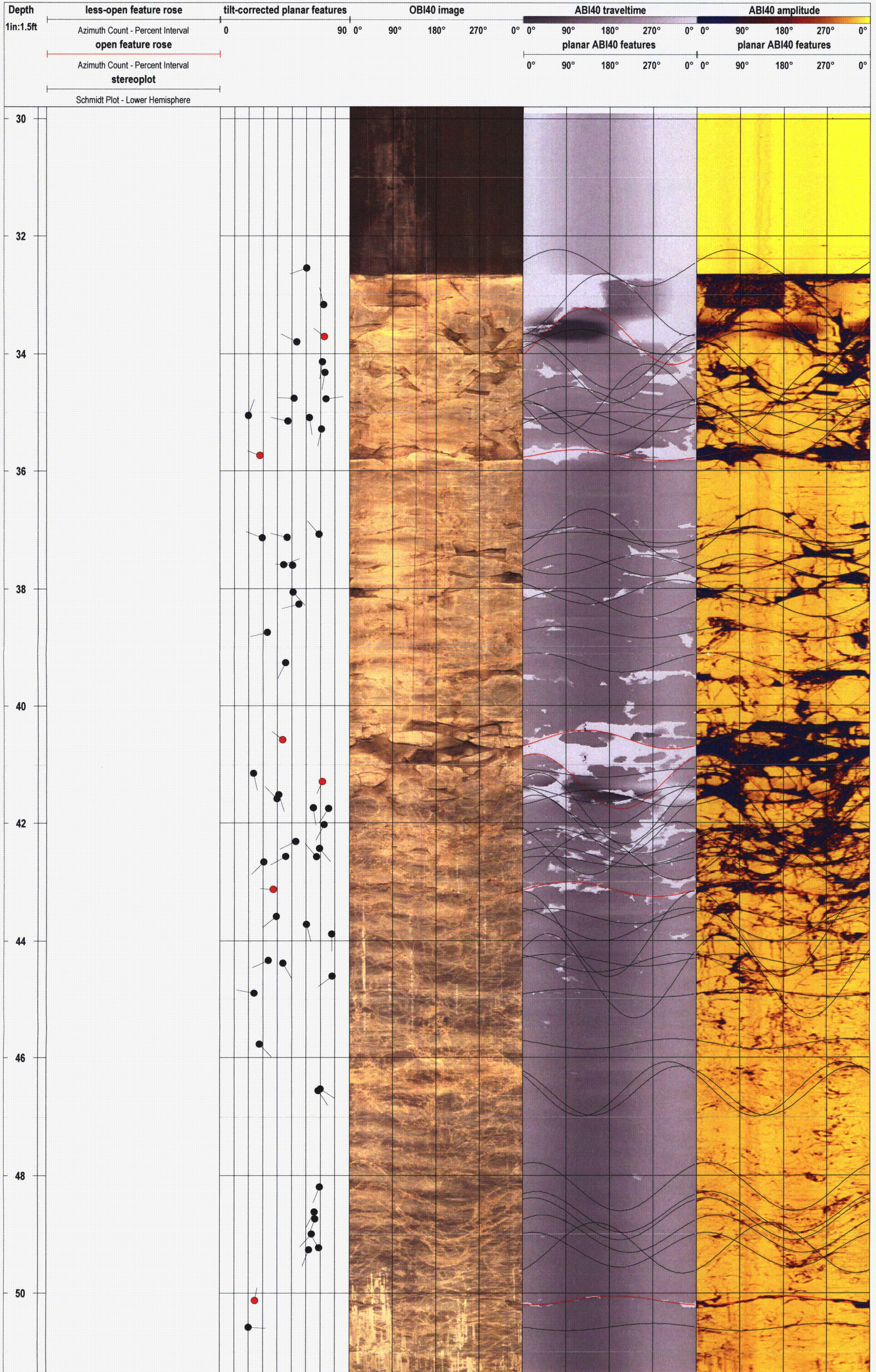
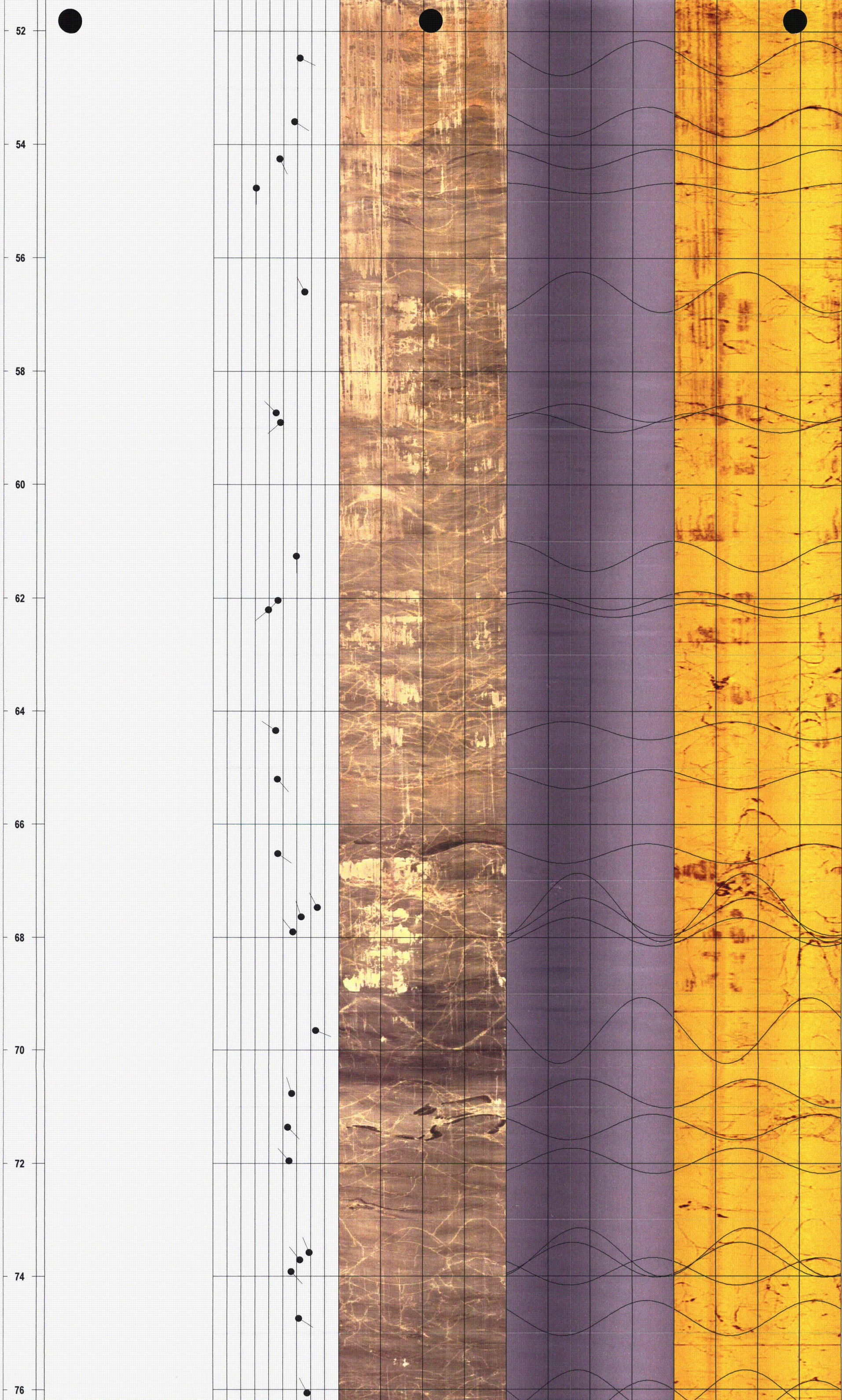
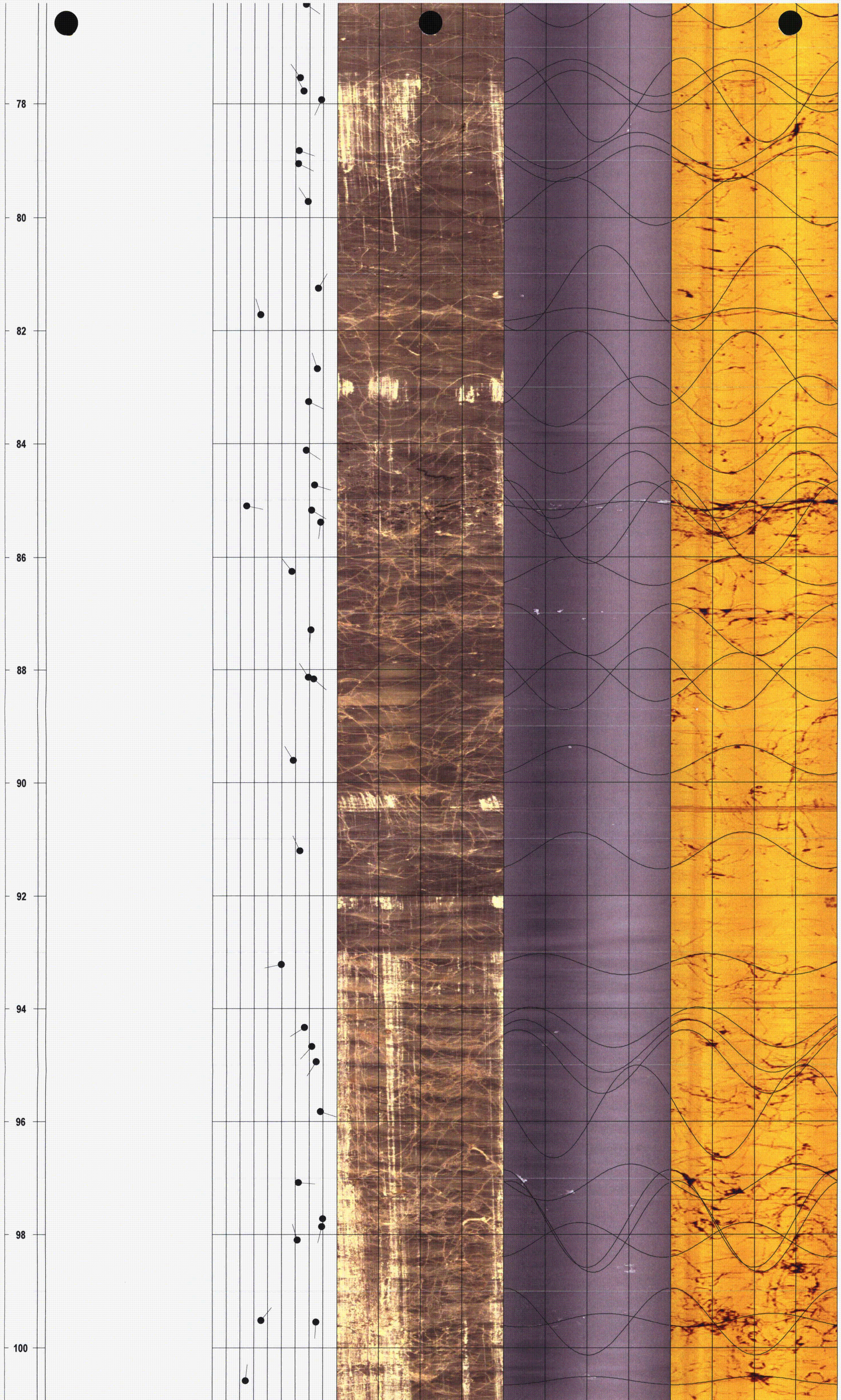
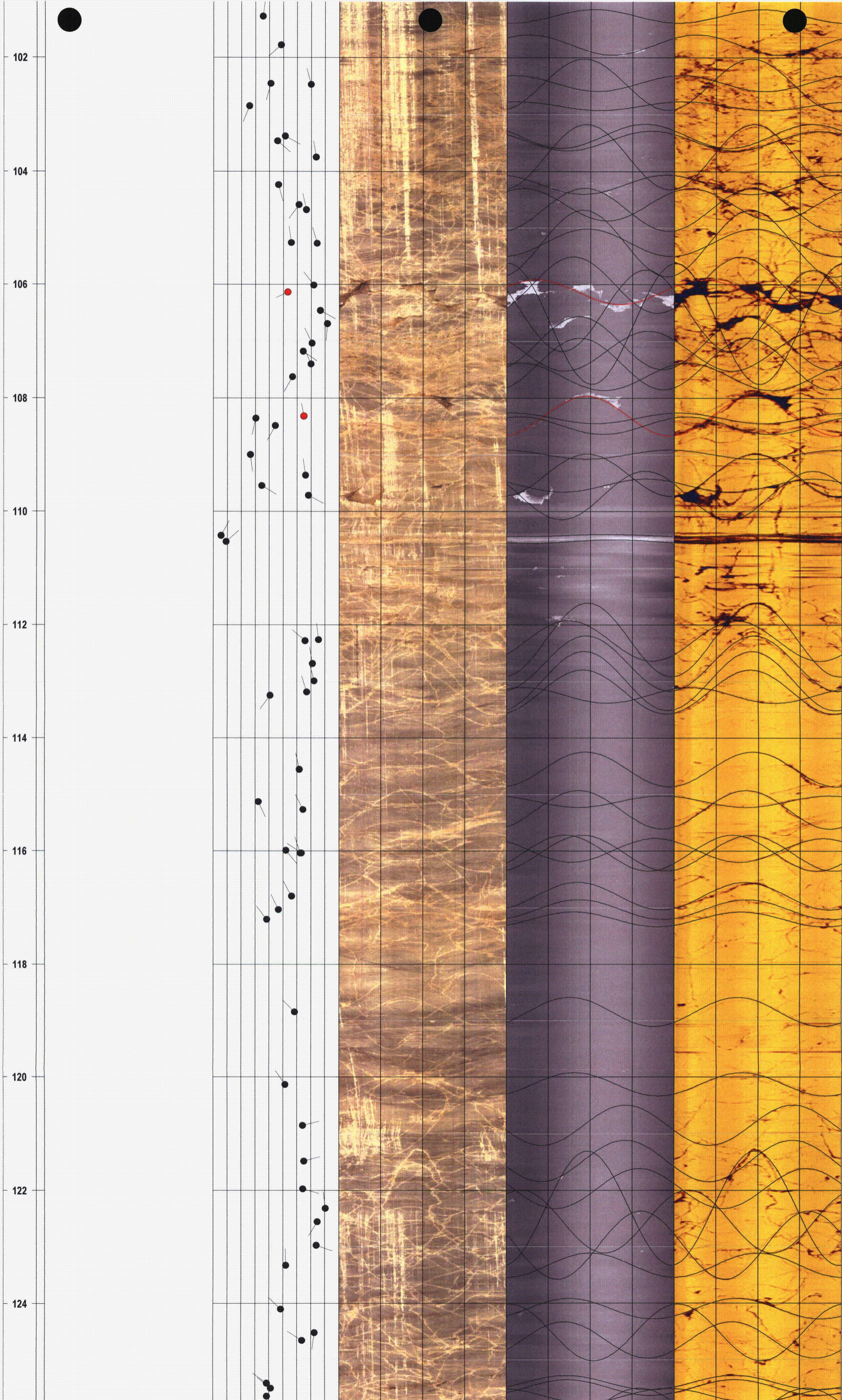


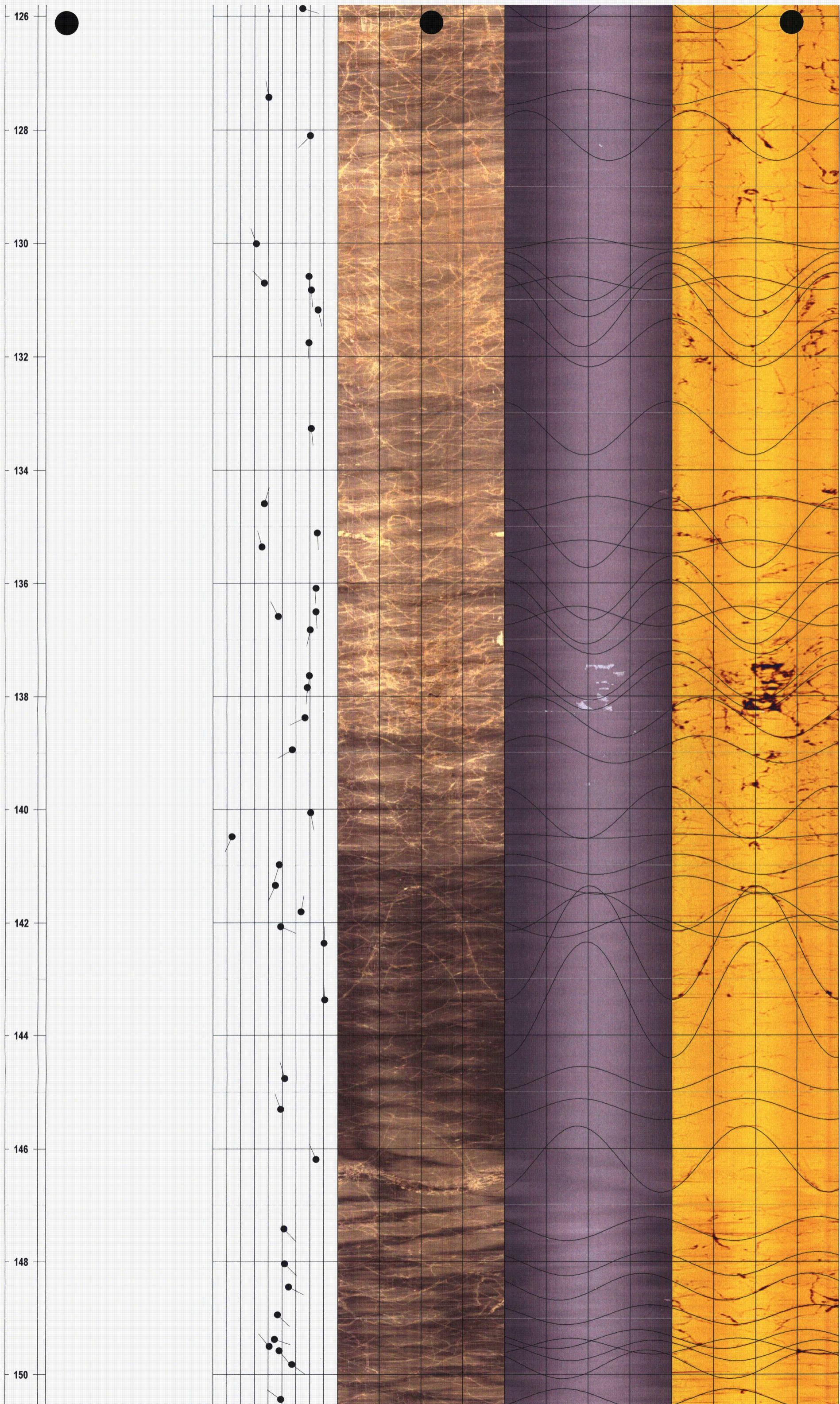
Project - Well: GZA / Buchanan, NY - MW-67 optical & acoustic televiewer logs

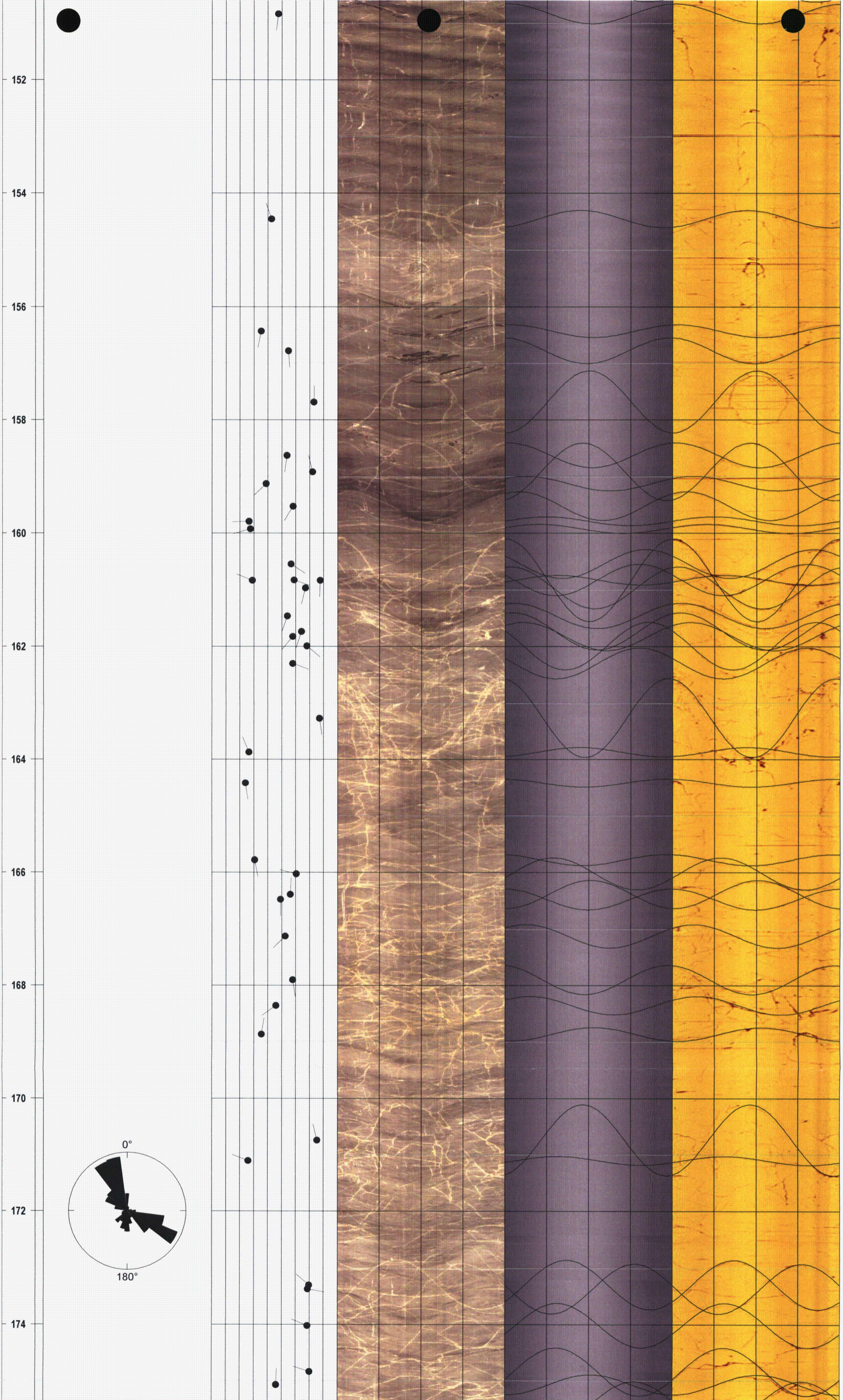




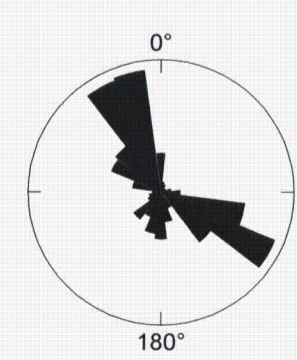


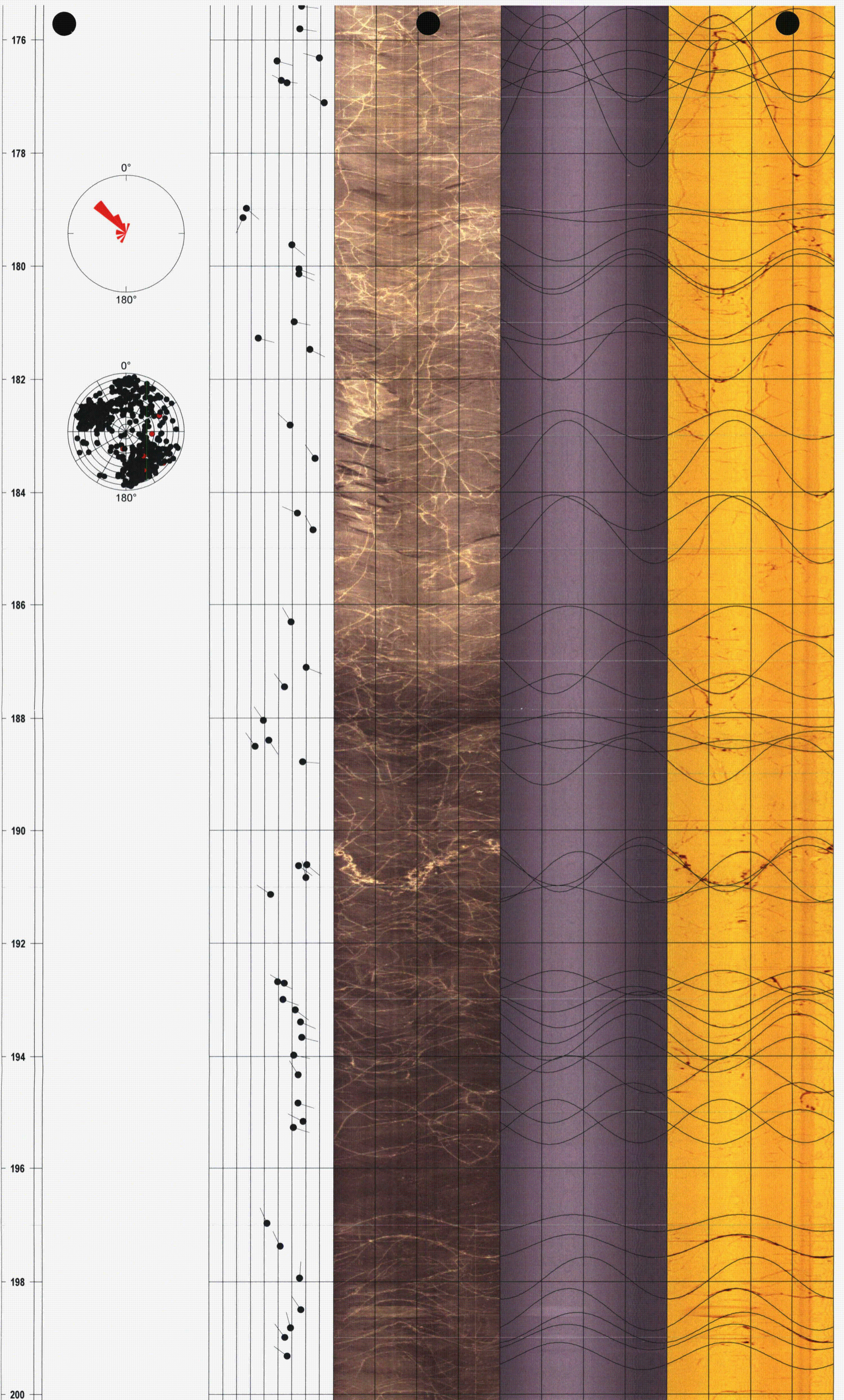


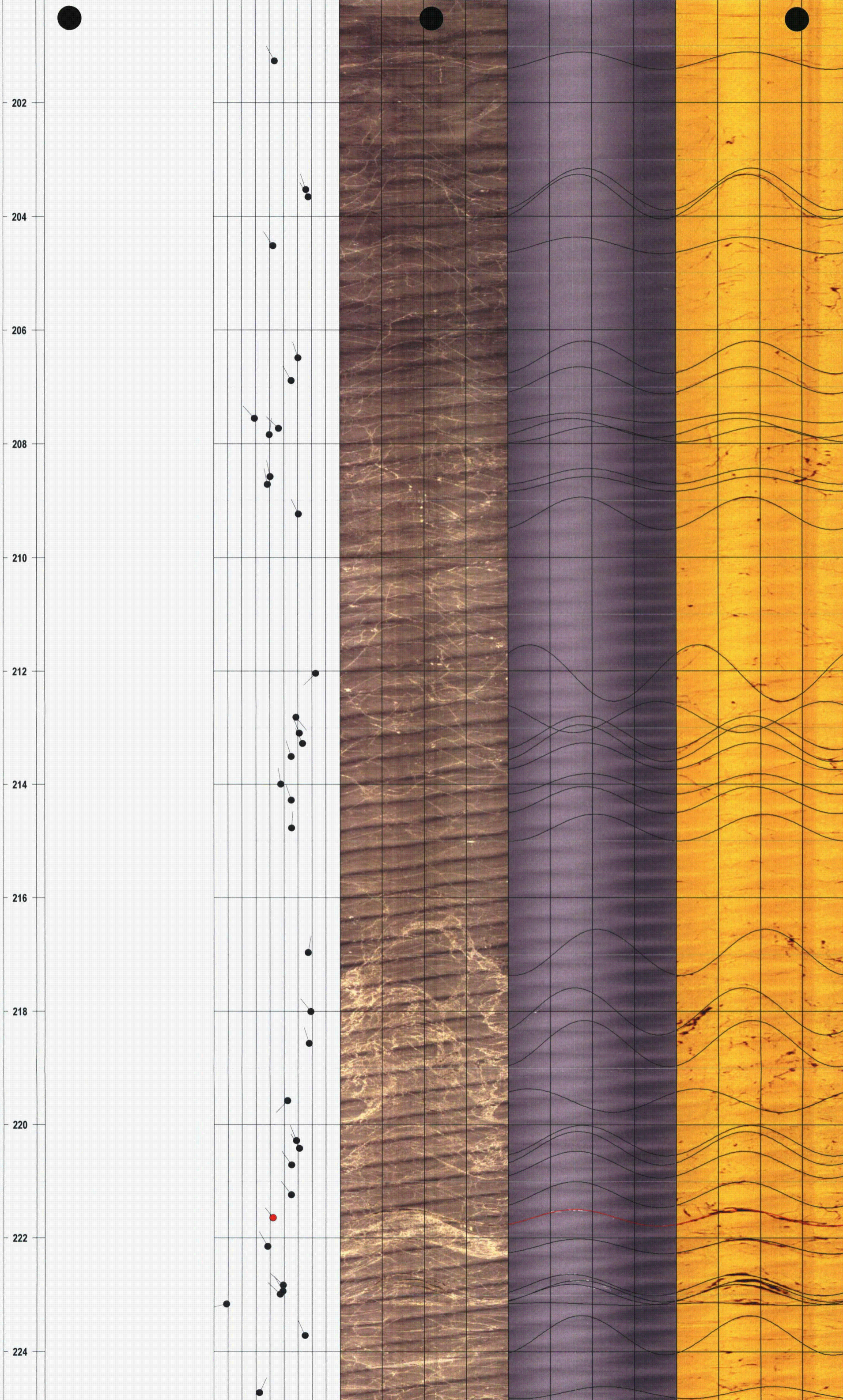




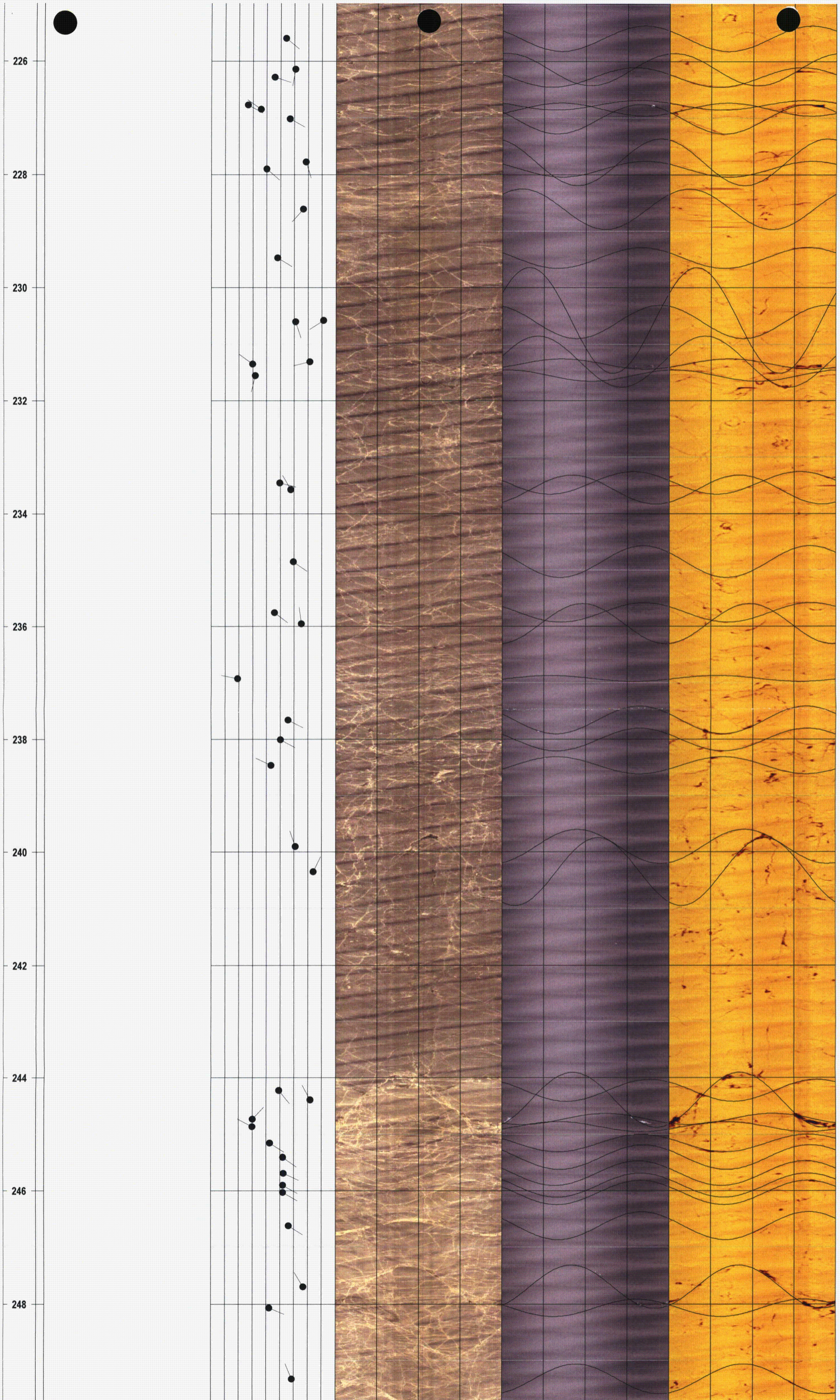
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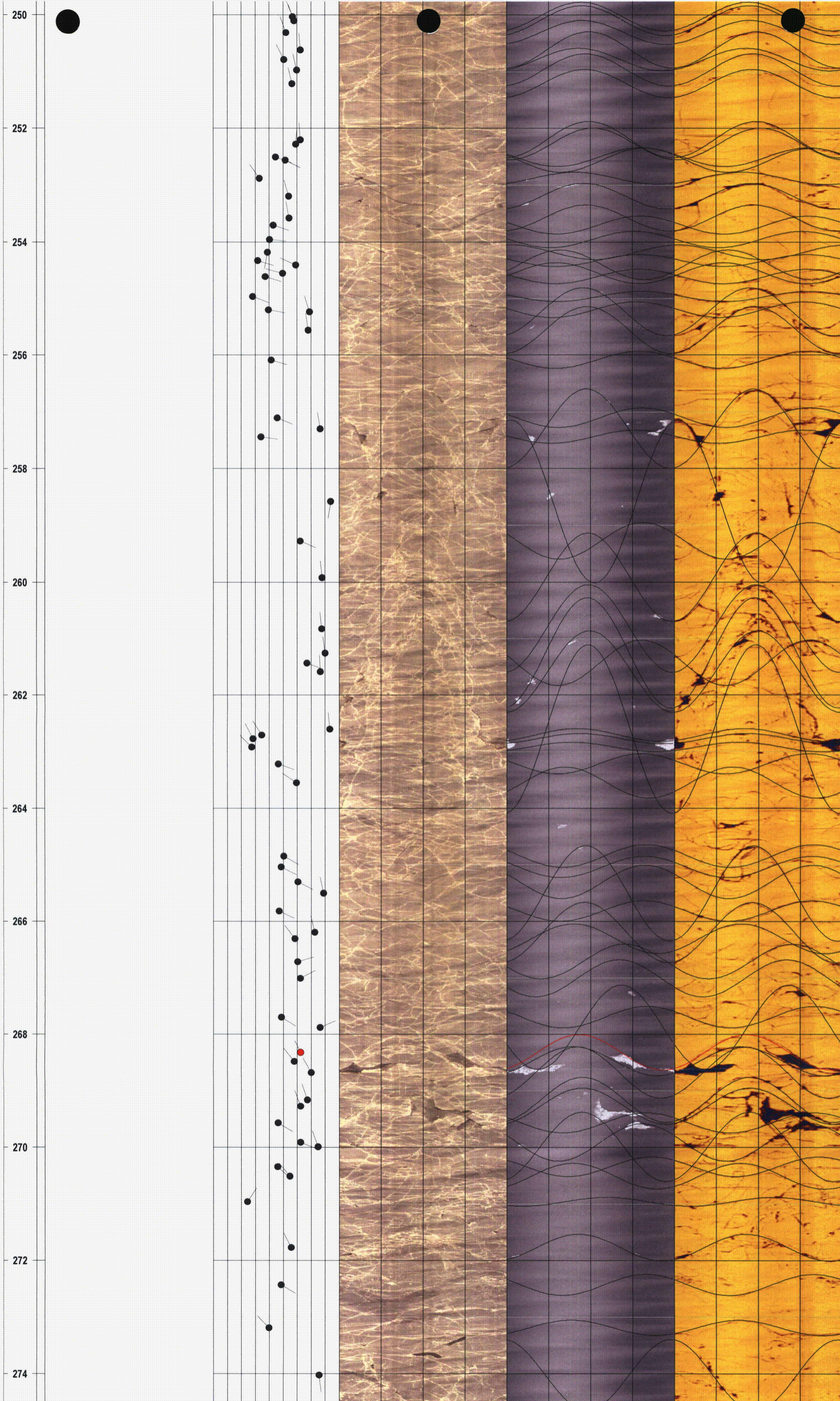


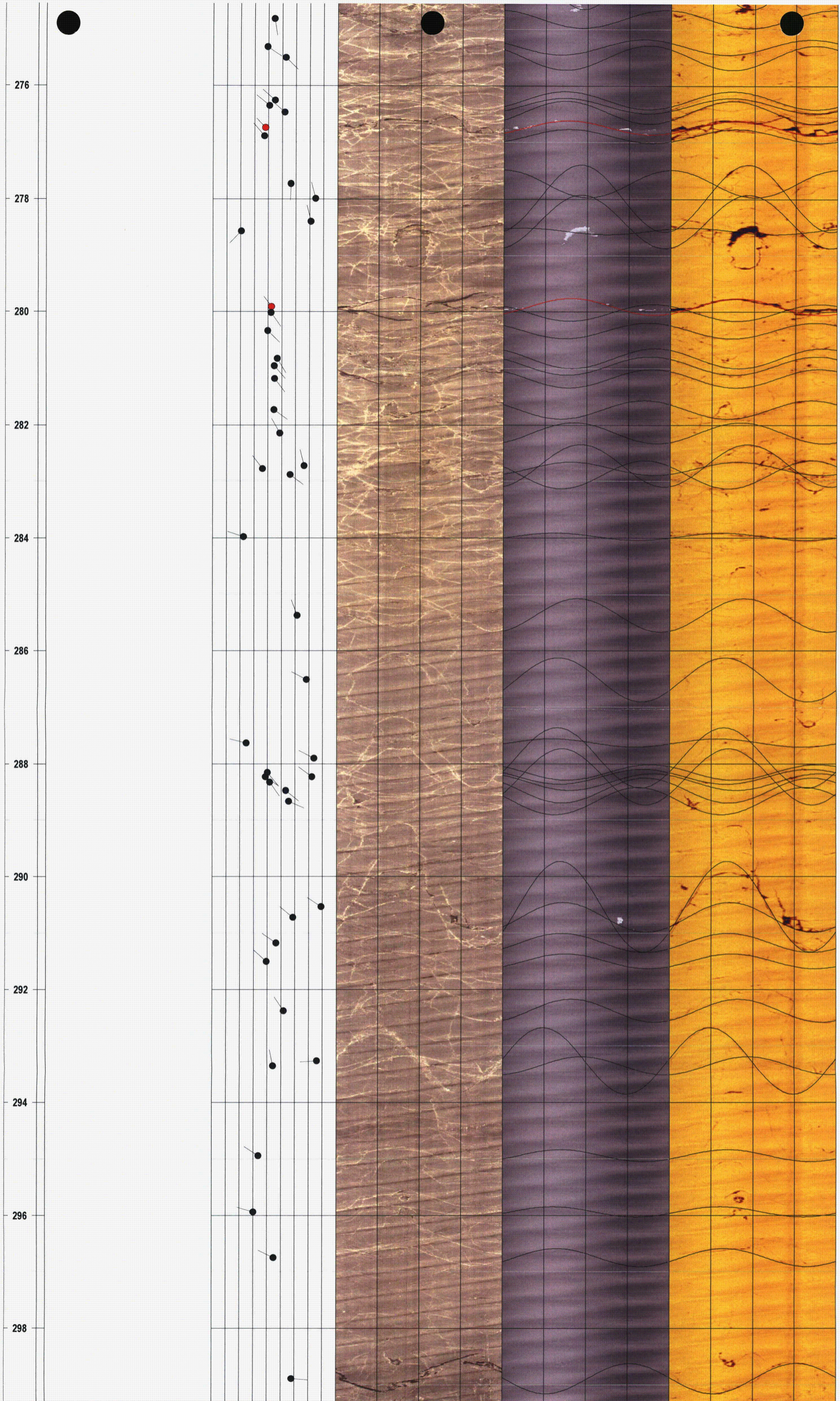


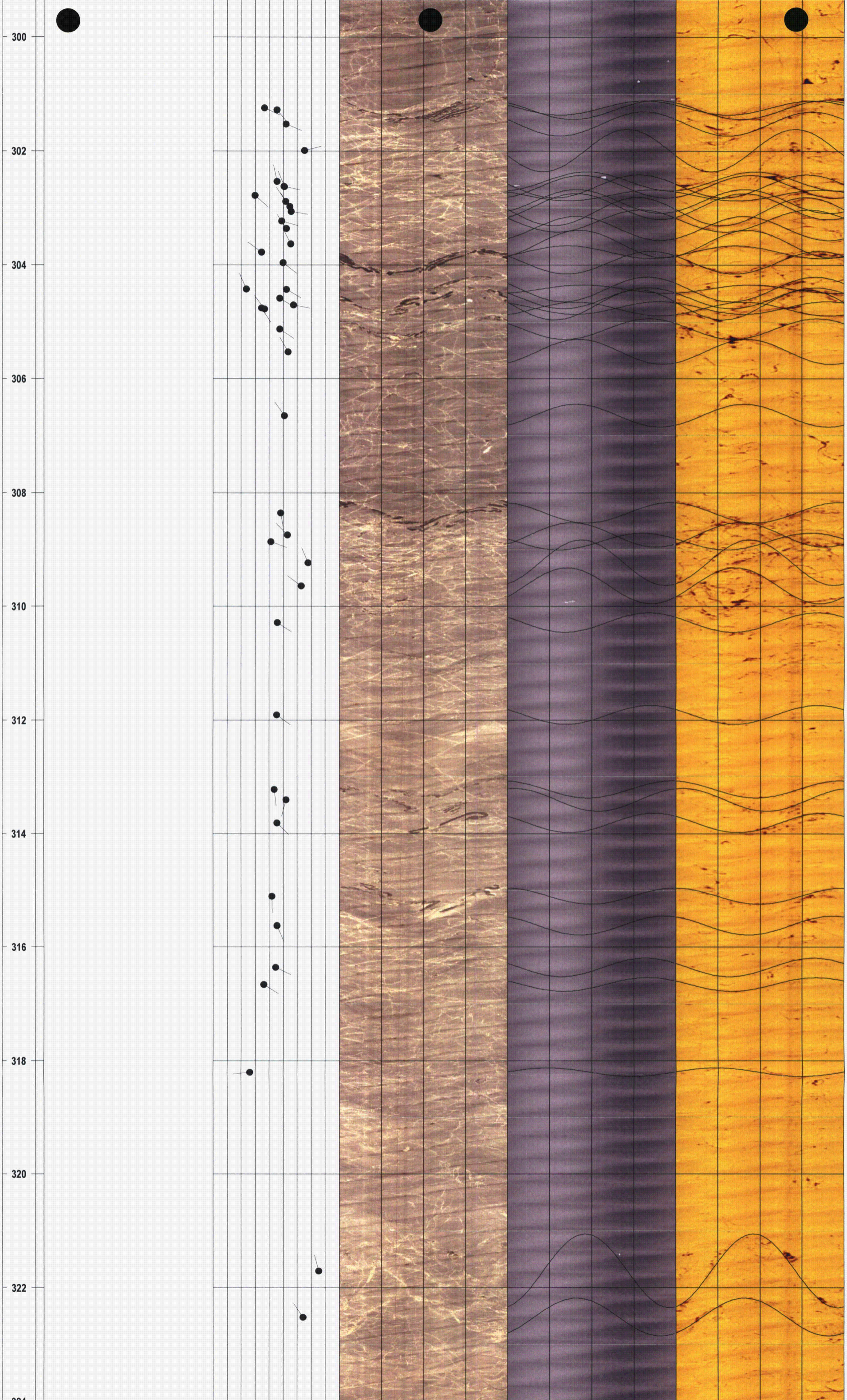


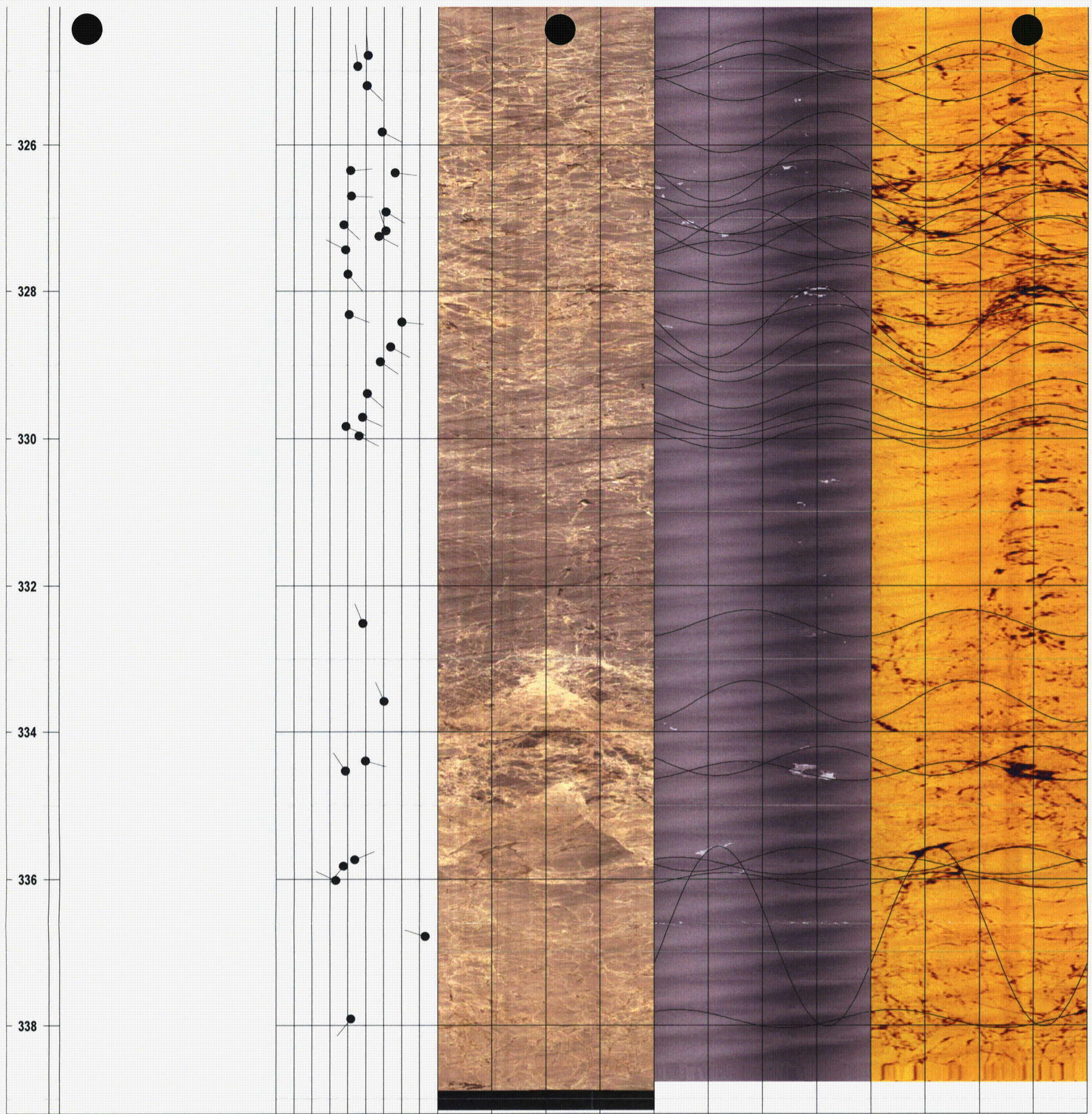




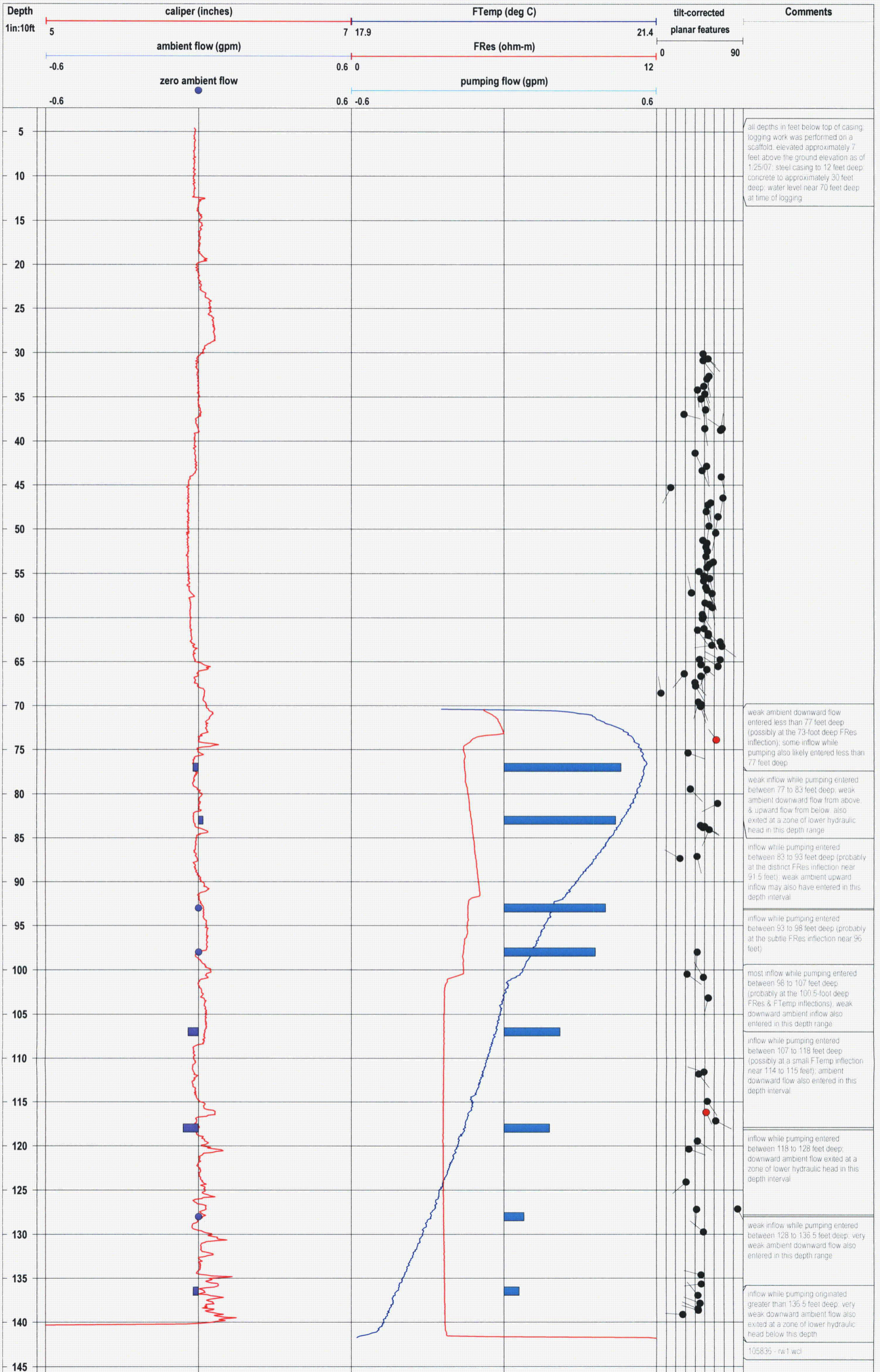








Project Well: GZA / Buchanan, NY - RW-1 conventional logs



all depths in feet below top of casing; logging work was performed on a scaffold - elevated approximately 7 feet above the ground elevation as of 1/25/07; steel casing to 12 feet deep; concrete to approximately 30 feet deep; water level near 70 feet deep at time of logging

weak ambient downward flow entered less than 77 feet deep (possibly at the 73-foot deep FRes inflection); some inflow while pumping also likely entered less than 77 feet deep

weak inflow while pumping entered between 77 to 83 feet deep; weak ambient downward flow from above & upward flow from below; also exited at a zone of lower hydraulic head in this depth range

inflow while pumping entered between 83 to 93 feet deep (probably at the distinct FRes inflection near 91.5 feet); weak ambient upward inflow may also have entered in this depth interval

inflow while pumping entered between 93 to 98 feet deep (probably at the subtle FRes inflection near 96 feet)

most inflow while pumping entered between 98 to 107 feet deep (probably at the 100.5-foot deep FRes & FTemp inflections); weak downward ambient inflow also entered in this depth range

inflow while pumping entered between 107 to 118 feet deep (possibly at a small FTemp inflection near 114 to 115 feet); ambient downward flow also entered in this depth interval

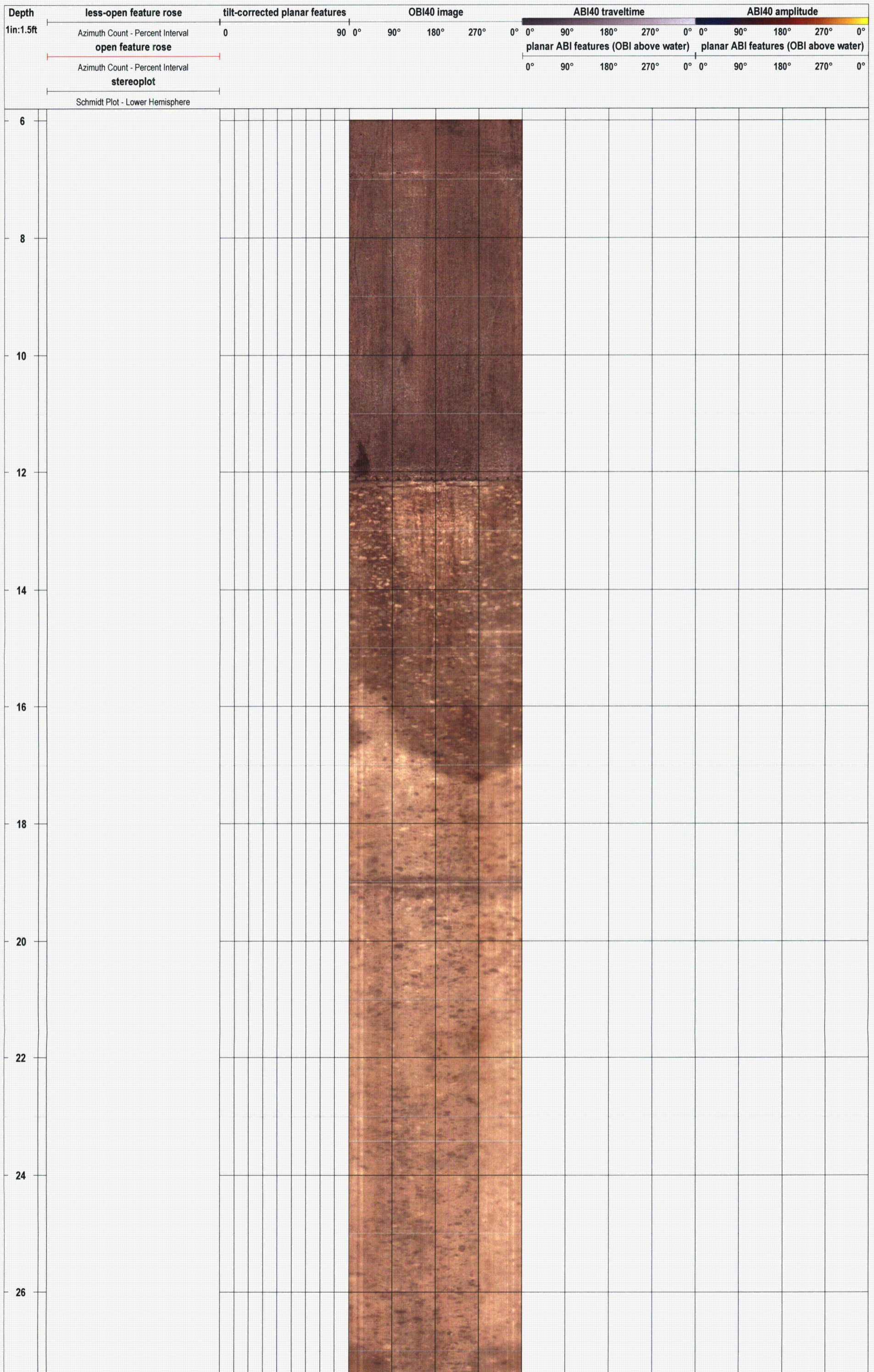
inflow while pumping entered between 118 to 128 feet deep; downward ambient flow exited at a zone of lower hydraulic head in this depth interval

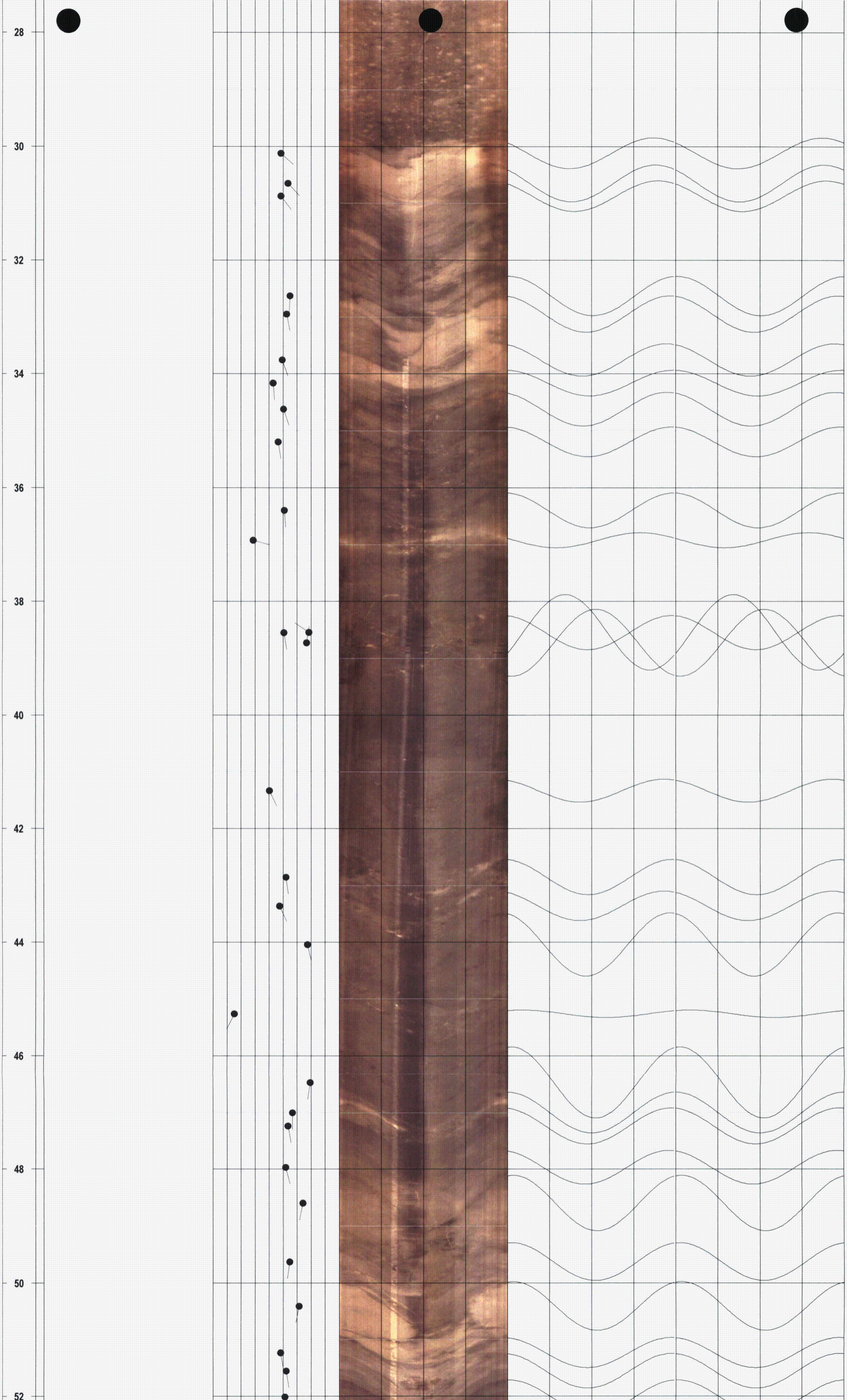
weak inflow while pumping entered between 128 to 136.5 feet deep; very weak ambient downward flow also entered in this depth range

inflow while pumping originated greater than 136.5 feet deep; very weak downward ambient flow also exited at a zone of lower hydraulic head below this depth

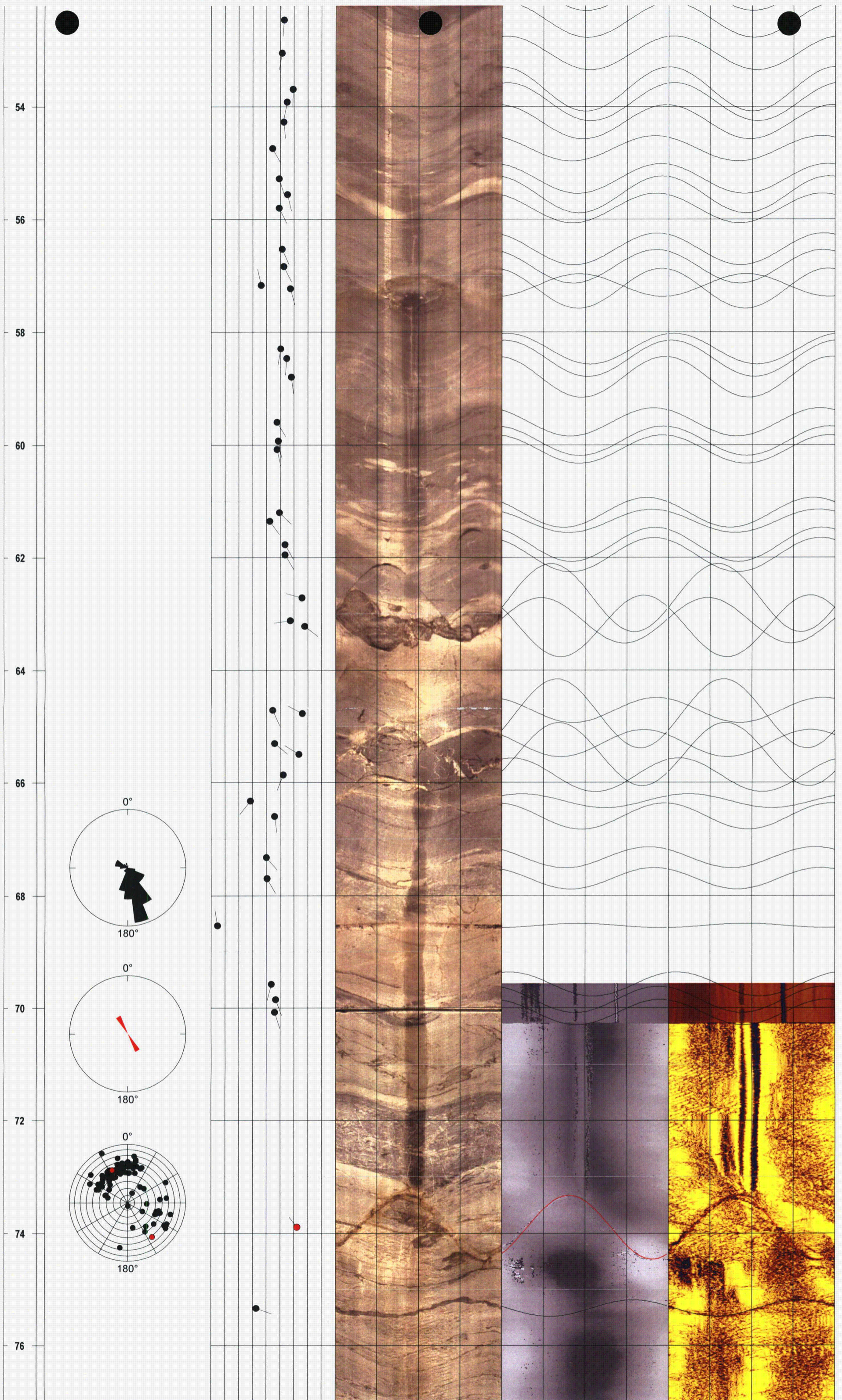
105836 - rw1 wcl

Project - Well: GZA / Buchanan, NY - RW-1 optical & acoustic televiewer logs









## Appendix B

### Planar-feature Orientations Measured from Acoustic Televiewer Logs

Fracture Orientations Interpreted from MW-46 Acoustic Televiewer Log  
 Indian Point Site  
 Buchanan, NY  
 Prepared for: GZA  
 105836 - mw46i.xls

| depth<br>(feet) | down-dip<br>compass<br>azimuth<br>(degrees) | dip<br>angle<br>(degrees) | interpreted<br>planar<br>feature<br>category |
|-----------------|---|---------------------------|--|
| 6.64            | 9.9   | 55.3                      | less-open                                    |
| 6.87            | 21.3  | 57.9                      | open   |
| 7.17            | 17.0  | 61.5                      | less-open                                    |
| 7.51            | 9.6   | 41.9                      | less-open                                    |
| 7.73            | 23.9  | 42.9                      | less-open                                    |
| 8.12            | 14.7  | 47.1                      | less-open                                    |
| 8.32            | 11.2  | 55.7                      | less-open                                    |
| 8.65            | 132.2                                       | 72.6                      | less-open                                    |
| 8.69            | 353.6                                       | 61.3                      | less-open                                    |
| 8.91            | 358.9                                       | 54.9                      | less-open                                    |
| 9.06            | 355.1                                       | 54.1                      | less-open                                    |
| 9.18            | 348.1                                       | 53.9                      | less-open                                    |
| 9.27            | 349.0                                       | 53.4                      | less-open                                    |
| 9.63            | 25.9  | 51.0                      | less-open                                    |
| 9.82            | 30.5  | 61.4                      | less-open                                    |
| 10.09           | 42.2  | 57.5                      | less-open                                    |
| 10.27           | 67.8  | 40.7                      | open   |
| 10.47           | 355.3                                       | 45.8                      | less-open                                    |
| 10.82           | 337.3                                       | 61.9                      | less-open                                    |
| 11.22           | 8.3   | 55.8                      | less-open                                    |
| 11.98           | 74.7  | 58.5                      | less-open                                    |
| 12.14           | 135.6                                       | 43.2                      | less-open                                    |
| 12.57           | 129.1                                       | 62.8                      | less-open                                    |
| 13.15           | 137.7                                       | 63.2                      | less-open                                    |
| 14.10           | 359.5                                       | 49.3                      | less-open                                    |
| 14.44           | 358.5                                       | 51.0                      | less-open                                    |
| 14.82           | 127.3                                       | 75.7                      | less-open                                    |
| 15.66           | 354.4                                       | 41.6                      | less-open                                    |
| 15.96           | 135.3                                       | 47.7                      | less-open                                    |
| 17.01           | 161.6                                       | 63.1                      | less-open                                    |
| 17.34           | 174.9                                       | 54.7                      | less-open                                    |
| 17.57           | 120.1                                       | 58.0                      | less-open                                    |
| 17.61           | 9.6   | 41.2                      | less-open                                    |
| 18.68           | 0.8   | 54.3                      | less-open                                    |
| 19.10           | 356.9                                       | 66.4                      | less-open                                    |
| 19.34           | 176.8                                       | 55.4                      | less-open                                    |
| 19.51           | 174.19                                      | 57.57                     | less-open                                    |
| 20.27           | 159.25                                      | 51.82                     | less-open                                    |
| 20.70           | 172.5                                       | 60.4                      | less-open                                    |
| 21.62           | 343.2                                       | 70.2                      | less-open                                    |
| 22.65           | 307.8                                       | 74.2                      | less-open                                    |
| 23.66           | 288.6                                       | 62.1                      | less-open                                    |
| 25.74           | 339.5                                       | 75.2                      | less-open                                    |
| 26.59           | 317.3                                       | 71.9                      | less-open                                    |

Note that down-dip compass azimuth is perpendicular to the strike direction.

Note that interpreted down-dip compass azimuths are with respect to magnetic north.

Down-dip azimuths & dip angles were corrected for borehole deviation from vertical.

Fracture Orientations Interpreted from MW-46 Acoustic Televiewer Log  
Indian Point Site  
Buchanan, NY  
Prepared for: GZA  
105836 - mw46i.xls

| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 26.87                   | 170.5   | 58.6                               | less-open  |
| 27.80                   | 325.8   | 68.9                               | less-open  |
| 29.58                   | 154.7   | 89.9                               | less-open  |
| 29.83                   | 182.1   | 89.5                               | less-open  |
| 30.10                   | 160.7   | 89.5                               | less-open  |

Fracture Orientations Interpreted from MW-53 Acoustic Televiewer Log  
 Indian Point Site  
 Buchanan, NY  
 Prepared for: GZA  
 105836 - mw53i.xls

| depth<br>(feet) | down-dip<br>compass<br>azimuth<br>(degrees) | dip<br>angle<br>(degrees) | interpreted<br>planar<br>feature<br>category |
|-----------------|---|---------------------------|--|
| 59.49           | 212.0                                       | 35.9                      | less-open                                    |
| 59.87           | 91.4  | 66.4                      | less-open                                    |
| 60.26           | 9.2   | 22.5                      | less-open                                    |
| 61.46           | 186.0                                       | 21.4                      | less-open                                    |
| 61.52           | 239.1                                       | 80.2                      | less-open                                    |
| 62.51           | 246.1                                       | 76.4                      | less-open                                    |
| 63.02           | 234.1                                       | 16.3                      | less-open                                    |
| 63.35           | 243.8                                       | 76.1                      | less-open                                    |
| 63.96           | 248.8                                       | 80.1                      | less-open                                    |
| 64.71           | 249.7                                       | 81.5                      | less-open                                    |
| 64.93           | 210.7                                       | 23.7                      | less-open                                    |
| 65.30           | 200.0                                       | 20.3                      | less-open                                    |
| 66.26           | 110.1                                       | 55.4                      | less-open                                    |
| 66.92           | 208.2                                       | 30.9                      | less-open                                    |
| 66.93           | 243.4                                       | 73.6                      | less-open                                    |
| 67.07           | 49.5  | 58.9                      | less-open                                    |
| 67.58           | 339.7                                       | 16.7                      | less-open                                    |
| 68.22           | 244.1                                       | 78.7                      | less-open                                    |
| 68.89           | 101.2                                       | 50.7                      | less-open                                    |
| 69.39           | 298.0                                       | 17.5                      | less-open                                    |
| 70.71           | 81.8  | 43.0                      | less-open                                    |
| 72.16           | 225.0                                       | 45.6                      | less-open                                    |
| 72.43           | 72.0  | 46.6                      | less-open                                    |
| 72.64           | 60.7  | 44.5                      | less-open                                    |
| 72.87           | 81.0  | 37.1                      | less-open                                    |
| 72.97           | 304.5                                       | 65.7                      | less-open                                    |
| 73.11           | 81.7  | 46.4                      | less-open                                    |
| 73.29           | 267.3                                       | 10.4                      | less-open                                    |
| 73.32           | 113.4                                       | 37.6                      | less-open                                    |
| 73.64           | 331.3                                       | 32.8                      | less-open                                    |
| 73.84           | 83.1  | 63.7                      | less-open                                    |
| 73.94           | 88.7  | 64.5                      | less-open                                    |
| 74.26           | 93.2  | 52.8                      | less-open                                    |
| 74.36           | 96.8  | 53.6                      | less-open                                    |
| 74.47           | 84.6  | 56.2                      | less-open                                    |
| 74.69           | 73.1  | 50.8                      | less-open                                    |
| 75.09           | 94.2  | 56.8                      | less-open                                    |
| 75.44           | 94.9  | 57.8                      | less-open                                    |
| 75.55           | 86.8  | 52.7                      | less-open                                    |
| 75.73           | 127.6                                       | 57.6                      | less-open                                    |
| 76.20           | 90.8  | 59.6                      | less-open                                    |
| 76.35           | 84.4  | 35.3                      | less-open                                    |
| 76.39           | 80.7  | 43.6                      | less-open                                    |
| 76.80           | 79.2  | 43.2                      | less-open                                    |

Note that down-dip compass azimuth is perpendicular to the strike direction.

Note that interpreted down-dip compass azimuths are with respect to magnetic north.

Down-dip azimuths & dip angles were corrected for borehole deviation from vertical.

Fracture Orientations Interpreted from MW-53 Acoustic Televiewer Log  
 Indian Point Site  
 Buchanan, NY  
 Prepared for: GZA  
 105836 - mw53i.xls

| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 77.26                   | 97.1  | 49.9                               | less-open  |
| 77.98                   | 97.1  | 63.4                               | less-open  |
| 78.86                   | 91.5  | 57.9                               | less-open  |
| 79.55                   | 81.3  | 48.3                               | less-open  |
| 79.68                   | 249.3   | 26.5                               | less-open  |
| 79.73                   | 67.2  | 40.1                               | less-open  |
| 83.82                   | 283.3   | 39.1                               | less-open  |
| 83.96                   | 227.8   | 20.0                               | less-open  |
| 85.22                   | 175.8   | 82.8                               | less-open  |
| 85.75                   | 181.8   | 83.3                               | less-open  |
| 87.78                   | 173.7   | 48.7                               | less-open  |
| 87.98                   | 176.5   | 18.1                               | less-open  |
| 90.57                   | 278.43  | 42.81                              | less-open  |
| 90.66                   | 71.17   | 34.2                               | less-open  |
| 91.50                   | 282.7   | 76.7                               | less-open  |
| 91.51                   | 124.3   | 49.1                               | less-open  |
| 92.29                   | 291.9   | 39.2                               | less-open  |
| 92.76                   | 223.0   | 23.4                               | less-open  |
| 93.80                   | 300.7   | 27.2                               | less-open  |
| 94.12                   | 231.0   | 32.9                               | less-open  |
| 94.51                   | 296.7   | 54.3                               | less-open  |
| 95.00                   | 165.6   | 64.2                               | less-open  |
| 95.28                   | 149.3   | 65.6                               | less-open  |
| 95.92                   | 98.0  | 50.1                               | less-open  |
| 96.21                   | 213.5   | 34.0                               | less-open  |
| 96.82                   | 97.5  | 78.3                               | less-open  |
| 98.29                   | 73.3  | 75.0                               | less-open  |
| 100.16                  | 86.8  | 44.0                               | less-open  |
| 100.81                  | 317.7   | 47.0                               | less-open  |
| 101.34                  | 307.4   | 39.5                               | less-open  |
| 101.65                  | 285.6   | 57.5                               | less-open  |
| 103.35                  | 78.0  | 68.3                               | less-open  |
| 103.37                  | 319.5   | 42.8                               | less-open  |
| 103.62                  | 241.3   | 41.6                               | less-open  |
| 103.96                  | 75.8  | 70.4                               | less-open  |
| 104.57                  | 72.8  | 68.2                               | less-open  |
| 104.65                  | 273.2   | 39.4                               | less-open  |
| 104.85                  | 272.8   | 47.8                               | less-open  |
| 105.48                  | 302.7   | 24.8                               | less-open  |
| 105.75                  | 281.5   | 22.7                               | less-open  |
| 106.77                  | 299.6   | 24.6                               | less-open  |
| 106.85                  | 270.3   | 26.6                               | less-open  |
| 108.23                  | 176.1   | 63.2                               | less-open  |
| 109.11                  | 169.84  | 47.02                              | less-open  |

Fracture Orientations Interpreted from MW-53 Acoustic Televiewer Log  
Indian Point Site  
Buchanan, NY  
Prepared for: GZA  
105836 - mw53i.xls

| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 109.67                  | 0.31  | 31.98                              | less-open  |
| 110.19                  | 310.4   | 33.0                               | less-open  |
| 110.61                  | 302.7   | 42.1                               | less-open  |
| 110.80                  | 313.3   | 39.0                               | less-open  |
| 111.13                  | 301.4   | 36.0                               | less-open  |
| 111.56                  | 281.4   | 30.2                               | less-open  |
| 113.18                  | 282.1   | 36.0                               | less-open  |
| 113.37                  | 266.8   | 29.7                               | less-open  |
| 114.51                  | 294.1   | 17.0                               | less-open  |
| 114.95                  | 321.5   | 38.6                               | less-open  |
| 116.43                  | 306.7   | 46.2                               | less-open  |
| 116.66                  | 318.2   | 42.1                               | less-open  |
| 117.27                  | 312.4   | 39.0                               | less-open  |
| 117.44                  | 281.6   | 33.8                               | less-open  |
| 117.78                  | 257.5   | 27.7                               | less-open  |
| 118.40                  | 306.9   | 19.2                               | less-open  |
| 119.38                  | 309.7   | 35.5                               | less-open  |
| 119.61                  | 61.3  | 90.0                               | less-open  |
| 124.11                  | 161.2   | 9.3                                | less-open  |

Fracture Orientations Interpreted from MW-54 Acoustic Televiewer Log  
 Indian Point Site  
 Buchanan, NY  
 Prepared for: GZA  
 105836 - mw54i.xls

| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 20.71                   | 47.8  | 68.3                               | less-open  |
| 21.20                   | 70.2  | 57.6                               | less-open  |
| 21.41                   | 54.9  | 53.2                               | less-open  |
| 21.52                   | 58.1  | 52.1                               | less-open  |
| 22.36                   | 74.3  | 52.4                               | less-open  |
| 22.60                   | 55.1  | 64.9                               | less-open  |
| 22.79                   | 74.3  | 44.7                               | less-open  |
| 23.14                   | 85.2  | 61.3                               | less-open  |
| 23.32                   | 245.7   | 39.5                               | less-open  |
| 23.37                   | 231.5   | 26.7                               | less-open  |
| 23.41                   | 235.2   | 19.8                               | less-open  |
| 23.66                   | 65.8  | 70.3                               | less-open  |
| 25.25                   | 223.6   | 31.0                               | less-open  |
| 25.82                   | 252.3   | 6.3                                | less-open  |
| 26.11                   | 304.8   | 5.3                                | less-open  |
| 26.45                   | 256.1   | 8.1                                | less-open  |
| 27.60                   | 60.1  | 74.7                               | less-open  |
| 28.65                   | 62.8  | 43.1                               | less-open  |
| 31.48                   | 141.7   | 64.5                               | less-open  |
| 31.80                   | 303.4   | 55.2                               | less-open  |
| 32.45                   | 304.8   | 18.9                               | less-open  |
| 32.53                   | 269.0   | 18.4                               | less-open  |
| 32.65                   | 110.7   | 68.5                               | less-open  |
| 32.97                   | 101.1   | 64.5                               | less-open  |
| 33.16                   | 98.9  | 68.5                               | less-open  |
| 33.45                   | 80.5  | 72.4                               | less-open  |
| 33.59                   | 85.1  | 71.5                               | less-open  |
| 33.79                   | 85.1  | 72.4                               | less-open  |
| 33.98                   | 85.4  | 72.0                               | less-open  |
| 34.40                   | 86.7  | 66.8                               | less-open  |
| 34.51                   | 104.5   | 65.7                               | less-open  |
| 34.82                   | 79.2  | 34.7                               | less-open  |
| 35.39                   | 115.7   | 71.0                               | less-open  |
| 35.54                   | 98.3  | 60.0                               | less-open  |
| 35.55                   | 127.1   | 70.7                               | less-open  |
| 36.28                   | 88.5  | 70.9                               | less-open  |
| 37.22                   | 90.2  | 80.1                               | less-open  |
| 37.66                   | 94.0  | 75.4                               | open   |
| 38.47                   | 299.5   | 45.9                               | less-open  |
| 38.76                   | 278.2   | 38.4                               | less-open  |
| 39.40                   | 65.4  | 66.8                               | less-open  |
| 39.43                   | 229.8   | 28.7                               | less-open  |
| 39.82                   | 99.8  | 67.3                               | less-open  |
| 41.26                   | 247.7   | 42.4                               | less-open  |

Note that down-dip compass azimuth is perpendicular to the strike direction.

Note that interpreted down-dip compass azimuths are with respect to magnetic north.

Down-dip azimuths & dip angles were corrected for borehole deviation from vertical.



Fracture Orientations Interpreted from MW-54 Acoustic Televiewer Log  
 Indian Point Site  
 Buchanan, NY  
 Prepared for: GZA  
 105836 - mw54i.xls

| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 43.44                   | 356.7   | 68.7                               | less-open  |
| 43.64                   | 96.9  | 71.8                               | less-open  |
| 43.64                   | 75.2  | 61.1                               | less-open  |
| 44.43                   | 112.5   | 20.7                               | less-open  |
| 45.99                   | 285.6   | 67.6                               | less-open  |
| 47.02                   | 312.1   | 76.5                               | less-open  |
| 48.78                   | 90.7  | 76.9                               | less-open  |
| 49.92                   | 93.2  | 75.5                               | less-open  |
| 50.11                   | 95.55   | 65.96                              | less-open  |
| 50.18                   | 137.24  | 39.76                              | less-open  |
| 50.30                   | 97.0  | 71.4                               | less-open  |
| 50.74                   | 101.8   | 66.8                               | less-open  |
| 51.21                   | 91.8  | 67.2                               | less-open  |
| 52.70                   | 213.1   | 34.3                               | less-open  |
| 53.21                   | 97.7  | 58.9                               | less-open  |
| 53.26                   | 126.7   | 17.8                               | less-open  |
| 54.21                   | 173.1   | 11.4                               | less-open  |
| 54.29                   | 254.6   | 4.7                                | less-open  |
| 55.13                   | 116.4   | 66.0                               | less-open  |
| 55.52                   | 117.7   | 61.3                               | less-open  |
| 55.82                   | 110.5   | 56.9                               | less-open  |
| 56.38                   | 99.6  | 55.3                               | less-open  |
| 56.70                   | 102.4   | 65.5                               | less-open  |
| 57.66                   | 75.8  | 76.0                               | less-open  |
| 58.87                   | 345.5   | 32.6                               | less-open  |
| 59.20                   | 325.5   | 60.1                               | less-open  |
| 59.43                   | 110.4   | 38.7                               | less-open  |
| 59.56                   | 334.4   | 58.7                               | less-open  |
| 60.81                   | 76.6  | 50.6                               | less-open  |
| 61.18                   | 322.9   | 63.1                               | less-open  |
| 61.48                   | 289.3   | 69.8                               | open   |
| 61.77                   | 292.6   | 54.4                               | less-open  |
| 62.54                   | 342.7   | 40.4                               | less-open  |
| 62.90                   | 346.7   | 36.8                               | less-open  |
| 64.24                   | 316.9   | 21.8                               | less-open  |
| 64.90                   | 131.8   | 76.8                               | less-open  |
| 65.14                   | 129.3   | 75.3                               | less-open  |
| 66.50                   | 315.0   | 67.5                               | less-open  |
| 67.36                   | 0.6   | 51.5                               | less-open  |
| 68.03                   | 353.27  | 59.96                              | less-open  |
| 68.45                   | 346.94  | 56.72                              | less-open  |
| 68.52                   | 358.3   | 70.8                               | less-open  |
| 68.92                   | 340.8   | 74.2                               | less-open  |
| 69.29                   | 343.9   | 64.2                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 69.38                   | 105.2   | 53.7                               | less-open  |
| 70.25                   | 97.8  | 60.2                               | less-open  |
| 70.72                   | 115.4   | 63.4                               | less-open  |
| 70.86                   | 342.3   | 51.5                               | less-open  |
| 71.09                   | 307.6   | 43.8                               | less-open  |
| 71.27                   | 324.1   | 54.9                               | less-open  |
| 72.00                   | 106.8   | 72.3                               | less-open  |
| 72.19                   | 104.2   | 69.3                               | less-open  |
| 72.71                   | 108.2   | 66.6                               | less-open  |
| 73.48                   | 100.3   | 68.3                               | less-open  |
| 74.00                   | 101.8   | 67.2                               | less-open  |
| 74.48                   | 106.8   | 74.3                               | less-open  |
| 75.56                   | 279.3   | 71.4                               | less-open  |
| 76.13                   | 320.9   | 75.6                               | less-open  |
| 76.24                   | 102.1   | 65.0                               | less-open  |
| 77.22                   | 106.1   | 42.62                              | less-open  |
| 77.25                   | 97.79   | 65.54                              | less-open  |
| 77.43                   | 111.9   | 59.8                               | less-open  |
| 78.78                   | 108.2   | 82.2                               | less-open  |
| 79.9                    | 208.0   | 54.9                               | less-open  |
| 80.4                    | 200.9   | 43.2                               | less-open  |
| 80.97                   | 197.1   | 50.5                               | less-open  |
| 81.31                   | 151.8   | 36.7                               | less-open  |
| 82.49                   | 64.7  | 38.6                               | less-open  |
| 84.73                   | 201.1   | 55.5                               | less-open  |
| 85.38                   | 342.2   | 68.5                               | less-open  |
| 86.44                   | 330.2   | 76.1                               | less-open  |
| 87.15                   | 354.5   | 48.7                               | less-open  |
| 87.27                   | 343.5   | 48.6                               | less-open  |
| 88.01                   | 326.4   | 60.7                               | less-open  |
| 88.18                   | 323.1   | 54.6                               | less-open  |
| 88.95                   | 114.6   | 72.2                               | less-open  |
| 89.87                   | 330.1   | 66.8                               | less-open  |
| 90.03                   | 356.9   | 60.7                               | less-open  |
| 90.32                   | 6.4   | 67.8                               | less-open  |
| 90.45                   | 90.1  | 22.3                               | less-open  |
| 91.5                    | 330.31  | 61.41                              | less-open  |
| 91.8                    | 312.63  | 54.48                              | less-open  |
| 92.37                   | 147.5   | 74.6                               | less-open  |
| 92.5                    | 345.8   | 57.4                               | less-open  |
| 93.33                   | 150.1   | 65.9                               | less-open  |
| 93.85                   | 147.9   | 76.8                               | less-open  |
| 95.47                   | 267.1   | 37.5                               | less-open  |
| 96.07                   | 119.9   | 57.9                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 97.15                   | 306.9   | 64.7                               | less-open  |
| 97.62                   | 145.05  | 64.89                              | less-open  |
| 97.65                   | 297.43  | 63.7                               | less-open  |
| 97.78                   | 126.9   | 32.0                               | less-open  |
| 98.28                   | 89.7  | 49.3                               | less-open  |
| 98.33                   | 203.7   | 41.3                               | less-open  |
| 98.89                   | 117.7   | 79.7                               | less-open  |
| 100.31                  | 90.0  | 64.9                               | less-open  |
| 101.02                  | 140.4   | 72.7                               | less-open  |
| 101.48                  | 133.7   | 59.9                               | less-open  |
| 101.99                  | 340.7   | 68.1                               | less-open  |
| 102.21                  | 86.5  | 58.4                               | less-open  |
| 102.57                  | 97.69   | 54.19                              | less-open  |
| 102.96                  | 88.35   | 57.77                              | less-open  |
| 103.22                  | 93.9  | 64.2                               | less-open  |
| 104.37                  | 130.5   | 66.3                               | less-open  |
| 105.64                  | 182.9   | 60.3                               | less-open  |
| 105.7                   | 296.0   | 71.7                               | less-open  |
| 106.64                  | 128.6   | 50.2                               | less-open  |
| 106.65                  | 300.8   | 72.4                               | less-open  |
| 107.08                  | 301.8   | 72.0                               | less-open  |
| 107.56                  | 285.5   | 41.0                               | less-open  |
| 107.82                  | 284.9   | 58.4                               | less-open  |
| 108.11                  | 137.9   | 49.5                               | less-open  |
| 108.41                  | 143.9   | 56.2                               | less-open  |
| 108.86                  | 280.2   | 49.5                               | less-open  |
| 109.19                  | 145.8   | 47.1                               | less-open  |
| 109.71                  | 291.7   | 64.6                               | less-open  |
| 109.73                  | 117.7   | 47.4                               | less-open  |
| 109.97                  | 129.3   | 58.5                               | less-open  |
| 110.15                  | 129.6   | 63.3                               | less-open  |
| 110.52                  | 131.5   | 64.9                               | less-open  |
| 110.85                  | 147.7   | 54.2                               | less-open  |
| 111.47                  | 144.8   | 67.6                               | less-open  |
| 111.78                  | 125.0   | 66.1                               | less-open  |
| 112.62                  | 320.3   | 62.8                               | less-open  |
| 112.89                  | 327.8   | 53.9                               | less-open  |
| 113.88                  | 105.5   | 67.5                               | less-open  |
| 114.08                  | 108.9   | 61.8                               | less-open  |
| 115.33                  | 154.1   | 68.2                               | less-open  |
| 115.48                  | 156.6   | 67.9                               | less-open  |
| 116.64                  | 145.5   | 37.2                               | less-open  |
| 117.38                  | 117.4   | 65.1                               | less-open  |
| 117.96                  | 100.1   | 57.8                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 118.31                  | 93.8  | 55.9                               | less-open  |
| 118.44                  | 97.3  | 56.6                               | less-open  |
| 118.71                  | 110.0   | 55.2                               | less-open  |
| 119.21                  | 128.0   | 67.3                               | less-open  |
| 119.85                  | 126.4   | 61.4                               | less-open  |
| 120.39                  | 131.7   | 54.2                               | less-open  |
| 120.72                  | 126.9   | 64.2                               | less-open  |
| 120.78                  | 193.1   | 43.6                               | less-open  |
| 121.03                  | 114.6   | 62.1                               | less-open  |
| 121.93                  | 137.7   | 66.0                               | less-open  |
| 122.49                  | 153.7   | 75.5                               | less-open  |
| 122.66                  | 299.4   | 77.0                               | less-open  |
| 122.85                  | 149.8   | 80.7                               | less-open  |
| 123.08                  | 300.8   | 73.4                               | less-open  |
| 123.32                  | 177.6   | 46.3                               | less-open  |
| 123.44                  | 309.9   | 60.1                               | less-open  |
| 123.94                  | 142.8   | 60.1                               | less-open  |
| 123.96                  | 283.4   | 60.4                               | less-open  |
| 124.35                  | 243.0   | 32.4                               | less-open  |
| 124.59                  | 245.8   | 33.1                               | less-open  |
| 124.66                  | 253.4   | 34.8                               | less-open  |
| 124.87                  | 114.2   | 51.7                               | less-open  |
| 125.01                  | 111.6   | 80.2                               | less-open  |
| 125.49                  | 113.3   | 42.0                               | less-open  |
| 125.8                   | 164.6   | 74.0                               | less-open  |
| 126.33                  | 152.7   | 75.7                               | less-open  |
| 127.48                  | 297.9   | 46.9                               | less-open  |
| 129.57                  | 107.9   | 45.4                               | less-open  |
| 129.83                  | 236.0   | 55.1                               | less-open  |
| 130.24                  | 103.3   | 62.9                               | less-open  |
| 130.68                  | 96.4  | 57.97                              | less-open  |
| 130.89                  | 93.06   | 38.06                              | less-open  |
| 131.08                  | 106.7   | 51.1                               | less-open  |
| 131.82                  | 123.8   | 41.6                               | less-open  |
| 133.03                  | 314.0   | 29.5                               | less-open  |
| 133.16                  | 308.6   | 48.8                               | less-open  |
| 133.99                  | 129.5   | 55.8                               | less-open  |
| 135.09                  | 331.1   | 56.6                               | less-open  |
| 136.35                  | 111.8   | 49.4                               | less-open  |
| 137.05                  | 98.6  | 57.6                               | less-open  |
| 137.38                  | 74.1  | 43.6                               | less-open  |
| 137.47                  | 115.1   | 63.8                               | less-open  |
| 137.58                  | 95.4  | 51.2                               | less-open  |
| 137.78                  | 88.1  | 56.6                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 137.9                   | 337.5   | 71.8                               | less-open  |
| 137.97                  | 88.8  | 68.3                               | less-open  |
| 138.09                  | 295.0   | 53.4                               | less-open  |
| 138.66                  | 119.7   | 40.0                               | less-open  |
| 138.94                  | 99.2  | 50.4                               | less-open  |
| 139.27                  | 122.5   | 64.1                               | less-open  |
| 139.51                  | 96.5  | 59.2                               | less-open  |
| 139.57                  | 286.5   | 61.6                               | less-open  |
| 139.59                  | 124.8   | 45.9                               | less-open  |
| 139.97                  | 68.8  | 58.3                               | less-open  |
| 140.15                  | 169.3   | 49.5                               | less-open  |
| 140.41                  | 44.7  | 21.1                               | less-open  |
| 140.45                  | 226.2   | 31.8                               | less-open  |
| 140.5                   | 83.7  | 63.1                               | less-open  |
| 140.74                  | 219.4   | 63.0                               | less-open  |
| 141.23                  | 244.3   | 26.9                               | less-open  |
| 142.24                  | 185.0   | 36.8                               | less-open  |
| 142.43                  | 119.6   | 78.1                               | less-open  |
| 144.42                  | 123.5   | 38.1                               | less-open  |
| 144.49                  | 113.1   | 67.7                               | less-open  |
| 144.61                  | 114.4   | 39.6                               | open   |
| 144.84                  | 124.6   | 41.3                               | open   |
| 145.01                  | 115.8   | 44.3                               | open   |
| 145.55                  | 95.2  | 44.0                               | less-open  |
| 145.86                  | 114.4   | 41.5                               | less-open  |
| 146.02                  | 104.1   | 46.0                               | less-open  |
| 146.14                  | 97.6  | 44.5                               | less-open  |
| 146.96                  | 175.8   | 75.4                               | less-open  |
| 147.41                  | 187.5   | 36.8                               | less-open  |
| 148.09                  | 325.3   | 56.8                               | less-open  |
| 148.52                  | 214.8   | 60.0                               | less-open  |
| 148.68                  | 196.9   | 35.0                               | less-open  |
| 148.82                  | 178.9   | 53.2                               | less-open  |
| 149.33                  | 188.4   | 40.3                               | less-open  |
| 149.42                  | 236.3   | 48.3                               | less-open  |
| 149.49                  | 183.0   | 40.8                               | less-open  |
| 149.8                   | 138.8   | 68.3                               | less-open  |
| 150.35                  | 81.1  | 49.7                               | less-open  |
| 150.59                  | 90.2  | 44.7                               | less-open  |
| 150.88                  | 122.6   | 69.4                               | less-open  |
| 151.01                  | 104.1   | 62.2                               | less-open  |
| 151.11                  | 357.7   | 80.9                               | less-open  |
| 151.24                  | 101.0   | 40.6                               | less-open  |
| 151.41                  | 109.44  | 47.09                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 151.51                  | 326.3   | 82.15                              | less-open  |
| 151.56                  | 111.92  | 50.04                              | less-open  |
| 151.94                  | 122   | 34.76                              | less-open  |
| 152.29                  | 141.66  | 34.49                              | less-open  |
| 152.67                  | 136.37  | 19.09                              | less-open  |
| 152.9                   | 115.89  | 49.52                              | less-open  |
| 153                     | 128.63  | 48.23                              | less-open  |
| 154.36                  | 80.63   | 51.46                              | less-open  |
| 155.49                  | 97.7  | 80.56                              | less-open  |
| 155.63                  | 74.18   | 55.48                              | less-open  |
| 155.69                  | 108.38  | 80.21                              | less-open  |
| 155.85                  | 149.48  | 55.4                               | less-open  |
| 156.47                  | 141.61  | 44.08                              | less-open  |
| 156.79                  | 144.32  | 44.71                              | less-open  |
| 156.99                  | 138.16  | 44.02                              | less-open  |
| 157.19                  | 181.39  | 22.46                              | less-open  |
| 157.47                  | 155.01  | 35.6                               | less-open  |
| 157.75                  | 137.27  | 24.69                              | less-open  |
| 157.97                  | 117.06  | 34.56                              | less-open  |
| 158.23                  | 112.25  | 54.24                              | less-open  |
| 158.56                  | 95.88   | 60.66                              | less-open  |
| 158.81                  | 92.67   | 66.08                              | less-open  |
| 159                     | 118.76  | 63.56                              | less-open  |
| 159.12                  | 106.72  | 64.15                              | less-open  |
| 159.25                  | 199.16  | 54.36                              | less-open  |
| 159.38                  | 102.96  | 57.88                              | less-open  |
| 159.42                  | 200.96  | 54.21                              | less-open  |
| 159.52                  | 96.59   | 65.17                              | less-open  |
| 160.2                   | 174.24  | 23.28                              | less-open  |
| 160.44                  | 109.22  | 72.43                              | less-open  |
| 161.52                  | 97.62   | 61.34                              | less-open  |
| 161.59                  | 101.72  | 72.06                              | less-open  |
| 162.09                  | 67.69   | 48.77                              | less-open  |
| 162.15                  | 189.75  | 62.14                              | less-open  |
| 162.29                  | 102.22  | 55.01                              | less-open  |
| 162.66                  | 270.05  | 67.01                              | less-open  |
| 162.79                  | 112.42  | 79.94                              | less-open  |
| 163.16                  | 257.7   | 23.17                              | less-open  |
| 163.81                  | 41.53   | 67.27                              | less-open  |
| 164.21                  | 75.9  | 76.37                              | less-open  |
| 164.5                   | 111.68  | 76.13                              | less-open  |
| 164.67                  | 136.22  | 76.2                               | less-open  |
| 166.59                  | 110.49  | 70.45                              | less-open  |
| 166.77                  | 103.34  | 56.55                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 167.12                  | 115.01  | 51.46                              | less-open  |
| 167.78                  | 90.05   | 48.31                              | less-open  |
| 168.4                   | 104.05  | 45.28                              | less-open  |
| 168.58                  | 114.26  | 45.14                              | less-open  |
| 168.8                   | 120.57  | 50.57                              | less-open  |
| 168.84                  | 299.18  | 72.09                              | less-open  |
| 169.27                  | 347.29  | 44.11                              | less-open  |
| 169.48                  | 336.05  | 39.28                              | less-open  |
| 169.61                  | 126.83  | 57.28                              | less-open  |
| 170.51                  | 108.91  | 75.55                              | less-open  |
| 170.9                   | 119.85  | 55.09                              | less-open  |
| 171.09                  | 145.65  | 57.06                              | less-open  |
| 172.27                  | 260.45  | 69.61                              | less-open  |
| 172.59                  | 266.38  | 74.6                               | less-open  |
| 172.65                  | 301.97  | 54.36                              | less-open  |
| 173.22                  | 107.06  | 57.71                              | less-open  |
| 173.55                  | 96.22   | 57.95                              | less-open  |
| 173.82                  | 319.98  | 54.15                              | open   |
| 173.9                   | 282.49  | 63.83                              | open   |
| 174.28                  | 304.29  | 70.31                              | open   |
| 175.46                  | 99.29   | 65.69                              | open   |
| 175.68                  | 100.21  | 58.12                              | open   |
| 176.3                   | 107.58  | 61.63                              | less-open  |
| 176.53                  | 114.7   | 60.28                              | less-open  |
| 177.18                  | 131.56  | 74.71                              | less-open  |
| 177.33                  | 133.76  | 69.94                              | less-open  |
| 177.56                  | 127.71  | 70.44                              | less-open  |
| 177.71                  | 115.46  | 74.43                              | less-open  |
| 178.62                  | 205.95  | 58.43                              | less-open  |
| 178.62                  | 356.98  | 34.55                              | less-open  |
| 179.28                  | 135.8   | 57.17                              | less-open  |
| 179.55                  | 357.58  | 85.59                              | less-open  |
| 179.58                  | 125.84  | 51.24                              | less-open  |
| 179.94                  | 111.69  | 32.09                              | less-open  |
| 180.6                   | 102.82  | 40.97                              | less-open  |
| 181.37                  | 174.85  | 68.71                              | less-open  |
| 181.72                  | 337.5   | 38.08                              | less-open  |
| 181.84                  | 37.21   | 32.02                              | less-open  |
| 181.94                  | 215.29  | 69.44                              | less-open  |
| 182.26                  | 252.59  | 30.92                              | less-open  |
| 182.43                  | 138.73  | 66.74                              | less-open  |
| 183.02                  | 113.3   | 71.43                              | less-open  |
| 183.3                   | 353.99  | 74.75                              | less-open  |
| 183.5                   | 106.78  | 73.85                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 183.85                  | 348.1   | 56.02                              | less-open  |
| 183.9                   | 88.16   | 75.46                              | less-open  |
| 184.48                  | 324.09  | 45.12                              | less-open  |
| 184.71                  | 104.66  | 50.09                              | less-open  |
| 185.31                  | 143.73  | 62.28                              | less-open  |
| 185.43                  | 312.61  | 58.3                               | less-open  |
| 185.58                  | 202.59  | 43.8                               | less-open  |
| 186.25                  | 323.48  | 70.49                              | less-open  |
| 186.28                  | 351.99  | 49.28                              | less-open  |
| 186.63                  | 108.02  | 73.31                              | less-open  |
| 186.71                  | 349.1   | 79.18                              | less-open  |
| 187.43                  | 85.19   | 64.98                              | less-open  |
| 187.66                  | 191.18  | 39.72                              | less-open  |
| 187.71                  | 133.74  | 56.02                              | less-open  |
| 187.98                  | 120.92  | 63.88                              | less-open  |
| 189.96                  | 174.43  | 53.43                              | less-open  |
| 189.98                  | 172.49  | 83.74                              | less-open  |
| 190.27                  | 163.97  | 44.03                              | less-open  |
| 190.76                  | 201.7   | 48.33                              | open   |
| 191.04                  | 146.33  | 46.61                              | open   |
| 192.42                  | 306.81  | 74.35                              | open   |
| 193.1                   | 101.31  | 40.74                              | less-open  |
| 193.48                  | 132.81  | 42.37                              | less-open  |
| 193.95                  | 201.15  | 59.7                               | less-open  |
| 194                     | 186.46  | 64.05                              | less-open  |
| 194.17                  | 101.92  | 63.2                               | less-open  |
| 194.72                  | 151.66  | 21.52                              | less-open  |
| 194.74                  | 180.84  | 70.53                              | less-open  |
| 194.94                  | 185.74  | 66.82                              | less-open  |
| 195.41                  | 320.64  | 38.82                              | less-open  |
| 195.58                  | 277.04  | 70.22                              | less-open  |
| 195.95                  | 107.66  | 36.37                              | less-open  |
| 196.75                  | 131.09  | 77.23                              | less-open  |
| 196.9                   | 319.35  | 73                                 | less-open  |
| 197.52                  | 305.11  | 62.94                              | less-open  |
| 197.68                  | 106.8   | 43.25                              | less-open  |
| 197.8                   | 301.62  | 57.49                              | less-open  |
| 198.26                  | 165.02  | 82.73                              | less-open  |
| 198.32                  | 144.69  | 75.02                              | less-open  |
| 199.48                  | 49.16   | 41.62                              | open   |
| 200.29                  | 118.03  | 33.85                              | less-open  |
| 200.52                  | 264.76  | 50.98                              | open   |
| 200.83                  | 290.39  | 44.84                              | less-open  |
| 201.07                  | 302.31  | 50.48                              | less-open  |



Fracture Orientations Interpreted from MW-54 Acoustic Televiewer Log  
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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 201.24                  | 278.07  | 43.53                              | less-open  |
| 201.72                  | 88.77   | 51.77                              | less-open  |
| 201.89                  | 111.94  | 55.94                              | less-open  |
| 201.97                  | 91.13   | 81.6                               | open   |
| 202.85                  | 134.08  | 53.6                               | less-open  |
| 203.08                  | 131.77  | 89.57                              | less-open  |
| 203.46                  | 271.73  | 89.31                              | less-open  |
| 203.68                  | 268.77  | 89.79                              | less-open  |
| 203.94                  | 289.97  | 89.99                              | less-open  |
| 204.3                   | 99.47   | 89.68                              | less-open  |

Fracture Orientations Interpreted from MW-55 Acoustic Televiewer Log  
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 Prepared for: GZA  
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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 12.43                   | 73.7  | 62.7                               | less-open  |
| 13.14                   | 63.9  | 66.6                               | less-open  |
| 13.38                   | 48.5  | 66.9                               | less-open  |
| 13.89                   | 316.3   | 61.1                               | less-open  |
| 14.29                   | 137.6   | 60.9                               | less-open  |
| 14.61                   | 113.4   | 54.5                               | less-open  |
| 15.20                   | 170.0   | 58.7                               | less-open  |
| 15.79                   | 143.1   | 50.6                               | less-open  |
| 15.91                   | 161.0   | 79.3                               | less-open  |
| 16.75                   | 226.4   | 67.8                               | less-open  |
| 16.91                   | 194.7   | 78.6                               | less-open  |
| 17.09                   | 161.4   | 60.0                               | less-open  |
| 17.21                   | 142.2   | 69.7                               | less-open  |
| 18.38                   | 73.2  | 70.2                               | less-open  |
| 19.43                   | 29.1  | 43.8                               | less-open  |
| 19.75                   | 108.2   | 38.3                               | less-open  |
| 20.01                   | 224.4   | 28.0                               | less-open  |
| 20.45                   | 203.3   | 24.3                               | less-open  |
| 20.52                   | 51.6  | 61.4                               | less-open  |
| 20.97                   | 328.2   | 61.3                               | less-open  |
| 21.94                   | 270.5   | 40.0                               | less-open  |
| 22.08                   | 310.2   | 75.2                               | less-open  |
| 23.31                   | 194.2   | 37.0                               | less-open  |
| 23.55                   | 316.6   | 68.4                               | less-open  |
| 23.73                   | 246.0   | 21.6                               | less-open  |
| 24.09                   | 140.7   | 39.0                               | less-open  |
| 24.50                   | 152.3   | 43.3                               | less-open  |
| 24.83                   | 174.2   | 24.4                               | less-open  |
| 25.04                   | 249.8   | 26.7                               | less-open  |
| 25.29                   | 160.3   | 30.5                               | less-open  |
| 25.62                   | 200.1   | 20.9                               | less-open  |
| 26.15                   | 138.5   | 24.3                               | less-open  |
| 26.95                   | 222.6   | 31.1                               | less-open  |
| 27.61                   | 197.7   | 49.5                               | less-open  |
| 27.66                   | 49.2  | 44.1                               | less-open  |
| 28.36                   | 269.6   | 68.4                               | less-open  |
| 29.50                   | 255.6   | 22.9                               | less-open  |
| 30.14                   | 119.8   | 40.4                               | less-open  |
| 32.29                   | 151.6   | 39.7                               | less-open  |
| 32.64                   | 85.1  | 52.9                               | less-open  |
| 32.73                   | 83.2  | 36.8                               | less-open  |
| 33.07                   | 112.3   | 73.0                               | less-open  |
| 33.23                   | 94.4  | 54.6                               | less-open  |
| 33.26                   | 313.6   | 82.7                               | less-open  |

Note that down-dip compass azimuth is perpendicular to the strike direction.

Note that interpreted down-dip compass azimuths are with respect to magnetic north.

Down-dip azimuths & dip angles were corrected for borehole deviation from vertical.

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 33.57                   | 141.2   | 63.3                               | less-open  |
| 34.29                   | 315.6   | 68.3                               | less-open  |
| 34.46                   | 168.6   | 63.4                               | less-open  |
| 35.59                   | 151.6   | 72.1                               | less-open  |
| 35.61                   | 290.2   | 75.7                               | less-open  |
| 36.09                   | 310.1   | 39.9                               | less-open  |
| 37.59                   | 244.8   | 53.0                               | less-open  |
| 37.80                   | 140.9   | 78.2                               | less-open  |
| 38.51                   | 114.6   | 78.5                               | less-open  |
| 39.67                   | 308.4   | 69.0                               | less-open  |
| 41.54                   | 185.5   | 53.9                               | less-open  |
| 43.38                   | 165.0   | 63.7                               | less-open  |
| 44.26                   | 177.8   | 63.7                               | less-open  |
| 44.96                   | 226.7   | 59.0                               | less-open  |
| 45.70                   | 23.9  | 33.5                               | less-open  |
| 45.89                   | 148.2   | 75.6                               | less-open  |
| 46.07                   | 203.62  | 70.35                              | less-open  |
| 46.13                   | 332.99  | 79.09                              | less-open  |
| 46.72                   | 102.0   | 45.2                               | less-open  |
| 47.04                   | 105.6   | 51.3                               | less-open  |
| 47.46                   | 93.7  | 21.0                               | open   |
| 48.73                   | 70.8  | 68.1                               | less-open  |
| 49.35                   | 249.2   | 33.3                               | less-open  |
| 49.84                   | 214.1   | 12.9                               | less-open  |
| 50.99                   | 283.2   | 55.2                               | less-open  |
| 51.23                   | 315.3   | 49.1                               | less-open  |
| 51.40                   | 124.3   | 14.2                               | less-open  |
| 51.59                   | 317.6   | 52.7                               | less-open  |
| 52.45                   | 85.7  | 36.4                               | less-open  |
| 52.91                   | 101.0   | 66.5                               | less-open  |
| 53.44                   | 80.8  | 43.1                               | open   |
| 53.61                   | 91.6  | 43.6                               | open   |
| 54.48                   | 287.2   | 38.3                               | less-open  |
| 55.31                   | 274.9   | 16.6                               | less-open  |
| 56.84                   | 63.9  | 58.8                               | less-open  |
| 57.34                   | 72.1  | 63.9                               | less-open  |
| 57.78                   | 97.0  | 58.5                               | less-open  |
| 58.59                   | 303.4   | 63.0                               | less-open  |
| 58.98                   | 288.8   | 62.5                               | less-open  |
| 59.13                   | 179.1   | 63.4                               | less-open  |
| 59.90                   | 321.0   | 41.8                               | less-open  |
| 60.36                   | 175.2   | 44.3                               | less-open  |
| 60.44                   | 315.2   | 56.9                               | less-open  |
| 60.45                   | 78.9  | 61.5                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 60.68                   | 96.1  | 73.6                               | less-open  |
| 61.30                   | 75.6  | 75.9                               | less-open  |
| 61.41                   | 103.2   | 77.8                               | less-open  |
| 61.55                   | 254   | 73.52                              | less-open  |
| 61.73                   | 74.96   | 65.95                              | less-open  |
| 61.82                   | 290.3   | 41.2                               | less-open  |
| 62.24                   | 268.3   | 51.6                               | less-open  |
| 62.47                   | 89.2  | 50.8                               | less-open  |
| 62.70                   | 311.2   | 43.6                               | less-open  |
| 63.25                   | 304.4   | 37.5                               | less-open  |
| 63.38                   | 87.5  | 51.2                               | less-open  |
| 63.50                   | 325.4   | 55.4                               | less-open  |
| 63.72                   | 238.9   | 29.7                               | less-open  |
| 64.04                   | 95.2  | 73.6                               | less-open  |
| 64.38                   | 87.1  | 68.2                               | less-open  |
| 64.53                   | 280.0   | 51.7                               | less-open  |
| 64.61                   | 295.5   | 48.5                               | less-open  |
| 64.90                   | 74.6  | 31.0                               | less-open  |
| 64.97                   | 85.4  | 70.3                               | less-open  |
| 65.01                   | 313.3   | 78.0                               | less-open  |
| 65.51                   | 359.9   | 52.5                               | less-open  |
| 65.75                   | 170.2   | 78.9                               | less-open  |
| 65.86                   | 324.3   | 43.7                               | less-open  |
| 66.06                   | 105.7   | 51.6                               | less-open  |
| 66.28                   | 62.5  | 68.9                               | less-open  |
| 66.74                   | 340.3   | 49.6                               | less-open  |
| 66.97                   | 358.6   | 55.5                               | less-open  |
| 67.33                   | 5.8   | 56.8                               | less-open  |
| 67.77                   | 1.3   | 54.6                               | less-open  |
| 68.07                   | 5.4   | 46.9                               | less-open  |
| 68.36                   | 338.9   | 47.3                               | less-open  |
| 68.58                   | 207.9   | 71.8                               | less-open  |
| 69.24                   | 302.5   | 48.3                               | less-open  |
| 69.78                   | 121.9   | 57.0                               | less-open  |
| 69.85                   | 201.0   | 60.4                               | less-open  |
| 70.55                   | 295.3   | 38.8                               | less-open  |
| 71.09                   | 270.1   | 26.7                               | less-open  |
| 71.44                   | 187.9   | 48.3                               | less-open  |
| 71.75                   | 203.4   | 59.7                               | less-open  |
| 72.14                   | 93.1  | 65.7                               | less-open  |
| 72.41                   | 187.4   | 56.0                               | less-open  |
| 73.92                   | 255.3   | 27.0                               | less-open  |
| 74.06                   | 178.9   | 59.6                               | less-open  |
| 74.29                   | 162.8   | 60.1                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 74.74                   | 330.0   | 46.9                               | less-open  |
| 75.26                   | 332.0   | 52.9                               | less-open  |
| 75.96                   | 307.2   | 5.1                                | less-open  |
| 76.15                   | 296.8   | 7.5                                | less-open  |
| 76.57                   | 174.6   | 12.0                               | less-open  |

Fracture Orientations Interpreted from MW-56 Optical & Acoustic Televiewer Logs  
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| depth<br>(feet) | down-dip<br>compass<br>azimuth<br>(degrees) | dip<br>angle<br>(degrees) | interpreted<br>planar<br>feature<br>category |
|-----------------|---|---------------------------|--|
| 31.02           | 193.2                                       | 77.7                      | less-open                                    |
| 32.45           | 172.6                                       | 51.9                      | less-open                                    |
| 32.56           | 223.5                                       | 79.8                      | less-open                                    |
| 32.91           | 228.3                                       | 79.4                      | less-open                                    |
| 33.01           | 11.8  | 73.6                      | less-open                                    |
| 33.68           | 338.5                                       | 40.3                      | less-open                                    |
| 35.65           | 144.0                                       | 20.1                      | less-open                                    |
| 36.90           | 147.2                                       | 63.8                      | less-open                                    |
| 37.81           | 346.6                                       | 49.7                      | less-open                                    |
| 38.79           | 5.3   | 73.1                      | less-open                                    |
| 39.83           | 85.6  | 30.5                      | less-open                                    |
| 40.01           | 115.0                                       | 34.2                      | less-open                                    |
| 41.21           | 13.2  | 67.1                      | less-open                                    |
| 41.71           | 301.2                                       | 52.2                      | less-open                                    |
| 42.54           | 1.9   | 59.5                      | less-open                                    |
| 42.60           | 155.1                                       | 64.4                      | open   |
| 43.33           | 79.6  | 20.0                      | less-open                                    |
| 43.83           | 0.8   | 65.0                      | less-open                                    |
| 44.42           | 1.0   | 68.8                      | less-open                                    |
| 44.83           | 176.1                                       | 66.8                      | less-open                                    |
| 45.02           | 4.3   | 65.8                      | less-open                                    |
| 45.29           | 6.9   | 70.5                      | less-open                                    |
| 45.70           | 8.3   | 73.7                      | less-open                                    |
| 46.96           | 173.3                                       | 36.4                      | less-open                                    |
| 47.05           | 10.0  | 70.6                      | less-open                                    |
| 48.10           | 166.9                                       | 17.8                      | less-open                                    |
| 48.39           | 4.4   | 74.6                      | less-open                                    |
| 50.31           | 212.2                                       | 14.6                      | less-open                                    |
| 51.62           | 188.2                                       | 3.2                       | less-open                                    |
| 51.70           | 329.9                                       | 5.7                       | less-open                                    |
| 51.78           | 155.6                                       | 8.3                       | less-open                                    |
| 51.94           | 10.3  | 9.4                       | less-open                                    |
| 52.50           | 6.0   | 65.7                      | less-open                                    |
| 52.84           | 198.0                                       | 4.6                       | less-open                                    |
| 53.20           | 220.7                                       | 62.2                      | less-open                                    |
| 53.68           | 341.3                                       | 43.8                      | less-open                                    |
| 54.13           | 121.1                                       | 13.3                      | less-open                                    |
| 56.09           | 330.9                                       | 38.3                      | less-open                                    |
| 57.17           | 351.7                                       | 52.6                      | less-open                                    |
| 57.20           | 320.9                                       | 47.7                      | less-open                                    |
| 57.22           | 203.7                                       | 37.4                      | less-open                                    |
| 57.59           | 200.8                                       | 70.3                      | less-open                                    |
| 57.62           | 290.5                                       | 14.6                      | less-open                                    |
| 58.17           | 207.9                                       | 78.3                      | less-open                                    |

Note that down-dip compass azimuth is perpendicular to the strike direction.

Note that interpreted down-dip compass azimuths are with respect to magnetic north.

Down-dip azimuths & dip angles were corrected for borehole deviation from vertical.

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 59.12                   | 84.6  | 8.1                                | less-open  |
| 59.84                   | 119.3   | 74.4                               | less-open  |
| 60.90                   | 341.3   | 46.4                               | less-open  |
| 61.10                   | 220.9   | 68.9                               | less-open  |
| 61.53                   | 223.12  | 61.57                              | less-open  |
| 61.69                   | 234.02  | 57.02                              | less-open  |
| 61.80                   | 27.8  | 9.2                                | less-open  |
| 61.86                   | 147.3   | 27.2                               | less-open  |
| 62.52                   | 357.3   | 41.1                               | less-open  |
| 62.52                   | 143.2   | 67.8                               | less-open  |
| 63.10                   | 274.6   | 35.7                               | less-open  |
| 63.33                   | 34.3  | 32.4                               | less-open  |
| 63.94                   | 307.3   | 36.8                               | less-open  |
| 64.50                   | 303.3   | 53.4                               | less-open  |
| 65.12                   | 171.8   | 59.2                               | less-open  |
| 65.40                   | 175.2   | 58.2                               | less-open  |
| 66.67                   | 328.3   | 61.1                               | less-open  |
| 67.98                   | 274.2   | 66.2                               | less-open  |
| 68.04                   | 275.4   | 62.9                               | less-open  |
| 68.71                   | 230.9   | 57.0                               | less-open  |
| 69.08                   | 271.2   | 8.0                                | less-open  |
| 69.29                   | 339.9   | 7.6                                | less-open  |
| 69.45                   | 173.0   | 50.2                               | less-open  |
| 69.86                   | 236.5   | 7.9                                | less-open  |
| 69.97                   | 325.9   | 18.3                               | less-open  |
| 70.17                   | 276.6   | 57.6                               | less-open  |
| 70.20                   | 176.3   | 71.9                               | less-open  |
| 70.33                   | 29.0  | 45.6                               | less-open  |
| 70.92                   | 294.8   | 6.0                                | less-open  |
| 71.00                   | 313.7   | 23.1                               | less-open  |
| 71.02                   | 294.5   | 65.8                               | less-open  |
| 71.54                   | 277.9   | 18.2                               | less-open  |
| 71.57                   | 179.0   | 75.8                               | less-open  |
| 71.68                   | 351.3   | 39.1                               | less-open  |
| 71.80                   | 19.0  | 36.1                               | less-open  |
| 72.66                   | 292.75  | 17.01                              | less-open  |
| 72.85                   | 220.08  | 79.25                              | less-open  |
| 73.30                   | 224.5   | 77.9                               | less-open  |
| 73.49                   | 218.8   | 26.4                               | less-open  |
| 73.79                   | 1.1   | 32.7                               | less-open  |
| 73.93                   | 171.5   | 63.2                               | less-open  |
| 74.41                   | 272.7   | 52.3                               | less-open  |
| 74.73                   | 254.2   | 45.0                               | less-open  |
| 75.28                   | 142.4   | 75.3                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 75.59                   | 351.8   | 24.1                               | less-open  |
| 75.77                   | 206.1   | 60.7                               | less-open  |
| 76.08                   | 170.7   | 70.9                               | less-open  |
| 76.61                   | 264.1   | 57.9                               | less-open  |
| 76.96                   | 258.2   | 57.5                               | less-open  |
| 77.04                   | 92.8  | 23.8                               | less-open  |
| 77.07                   | 263.1   | 56.8                               | less-open  |
| 77.33                   | 170.4   | 49.3                               | less-open  |
| 77.53                   | 203.97  | 61.43                              | less-open  |
| 77.54                   | 186.69  | 58.9                               | less-open  |
| 78.64                   | 161.9   | 71.6                               | less-open  |
| 78.80                   | 357.0   | 82.9                               | less-open  |
| 78.92                   | 162.2   | 54.7                               | less-open  |
| 79.13                   | 171.07  | 80.07                              | less-open  |
| 79.25                   | 179.42  | 63.94                              | less-open  |
| 79.39                   | 122.5   | 78.8                               | less-open  |
| 79.77                   | 255.8   | 40.1                               | less-open  |
| 79.96                   | 171.5   | 50.8                               | less-open  |
| 80.5                    | 175.0   | 23.6                               | less-open  |
| 80.66                   | 178.2   | 71.3                               | less-open  |
| 80.75                   | 220.7   | 34.8                               | less-open  |
| 80.83                   | 318.4   | 53.0                               | less-open  |
| 80.98                   | 178.3   | 78.0                               | less-open  |
| 81.11                   | 239.4   | 52.6                               | less-open  |
| 81.19                   | 180.2   | 75.5                               | less-open  |
| 81.58                   | 181.1   | 72.7                               | less-open  |
| 81.72                   | 173.8   | 36.1                               | less-open  |
| 81.9                    | 154.6   | 70.5                               | less-open  |
| 83.01                   | 185.9   | 80.3                               | less-open  |
| 83.93                   | 150.2   | 59.4                               | less-open  |
| 84.27                   | 228.9   | 31.3                               | less-open  |
| 84.28                   | 341.8   | 67.2                               | less-open  |
| 84.59                   | 221.0   | 38.6                               | less-open  |
| 84.86                   | 207.4   | 54.4                               | less-open  |
| 85.35                   | 235.87  | 62.96                              | less-open  |
| 85.61                   | 59.54   | 89.93                              | less-open  |
| 86.14                   | 70.5  | 87.3                               | less-open  |
| 86.51                   | 215.7   | 89.5                               | less-open  |



Fracture Orientations Interpreted from MW-57 Acoustic Televiewer Log  
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| depth<br>(feet) | down-dip<br>compass<br>azimuth<br>(degrees) | dip<br>angle<br>(degrees) | interpreted<br>planar<br>feature<br>category |
|-----------------|---|---------------------------|--|
| 6.17            | 133.4                                       | 77.5                      | less-open                                    |
| 6.44            | 64.8  | 16.0                      | open   |
| 6.61            | 300.2                                       | 5.1                       | less-open                                    |
| 6.88            | 162.4                                       | 44.0                      | less-open                                    |
| 7.36            | 235.1                                       | 36.9                      | less-open                                    |
| 7.46            | 41.7  | 16.4                      | less-open                                    |
| 7.75            | 25.6  | 21.9                      | less-open                                    |
| 7.86            | 336.3                                       | 8.6                       | open   |
| 8.53            | 345.4                                       | 16.3                      | less-open                                    |
| 9.12            | 254.4                                       | 72.8                      | less-open                                    |
| 9.44            | 352.5                                       | 48.0                      | less-open                                    |
| 10.25           | 45.9  | 29.2                      | less-open                                    |
| 10.52           | 40.1  | 18.0                      | less-open                                    |
| 10.74           | 355.5                                       | 20.8                      | less-open                                    |
| 10.87           | 15.1  | 31.0                      | less-open                                    |
| 11.03           | 28.8  | 25.5                      | open   |
| 11.12           | 308.4                                       | 26.8                      | less-open                                    |
| 11.24           | 332.1                                       | 27.3                      | less-open                                    |
| 11.41           | 99.0  | 56.1                      | less-open                                    |
| 11.99           | 101.7                                       | 61.8                      | less-open                                    |
| 12.20           | 356.5                                       | 18.4                      | less-open                                    |
| 12.70           | 41.0  | 11.0                      | less-open                                    |
| 13.42           | 97.9  | 68.3                      | less-open                                    |
| 15.90           | 314.5                                       | 16.3                      | less-open                                    |
| 16.34           | 4.4   | 15.5                      | less-open                                    |
| 16.34           | 105.8                                       | 80.4                      | less-open                                    |
| 17.61           | 355.4                                       | 16.2                      | less-open                                    |
| 18.44           | 172.2                                       | 55.9                      | less-open                                    |
| 19.58           | 291.9                                       | 32.1                      | less-open                                    |
| 19.82           | 90.1  | 67.9                      | less-open                                    |
| 21.17           | 7.9   | 26.3                      | less-open                                    |
| 21.76           | 336.3                                       | 15.9                      | less-open                                    |
| 22.01           | 266.5                                       | 22.1                      | less-open                                    |
| 22.85           | 311.4                                       | 32.7                      | less-open                                    |
| 22.86           | 194.6                                       | 64.5                      | less-open                                    |
| 23.76           | 343.6                                       | 47.0                      | less-open                                    |
| 24.19           | 131.9                                       | 59.8                      | less-open                                    |
| 25.08           | 146.6                                       | 68.2                      | less-open                                    |
| 25.76           | 169.6                                       | 69.0                      | less-open                                    |
| 28.16           | 109.9                                       | 59.0                      | less-open                                    |
| 28.35           | 257.3                                       | 73.2                      | less-open                                    |
| 29.15           | 115.3                                       | 73.5                      | less-open                                    |
| 29.71           | 279.9                                       | 20.8                      | open   |
| 29.77           | 82.1  | 74.8                      | less-open                                    |

Note that down-dip compass azimuth is perpendicular to the strike direction.

Note that interpreted down-dip compass azimuths are with respect to magnetic north.

Down-dip azimuths & dip angles were corrected for borehole deviation from vertical.

Fracture Orientations Interpreted from MW-57 Acoustic Televiewer Log  
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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 30.12                   | 76.8  | 74.2                               | less-open  |
| 30.46                   | 90.7  | 77.5                               | less-open  |
| 30.95                   | 94.5  | 73.0                               | less-open  |
| 31.81                   | 143.4   | 77.6                               | less-open  |
| 32.02                   | 129.2   | 73.3                               | less-open  |
| 32.04                   | 331.4   | 37.0                               | less-open  |
| 32.37                   | 291.45  | 33.23                              | less-open  |
| 32.5                    | 247.4   | 80.52                              | less-open  |
| 32.72                   | 115.1   | 35.5                               | less-open  |
| 32.87                   | 284.4   | 60.6                               | less-open  |
| 32.96                   | 286.0   | 38.2                               | less-open  |
| 33.37                   | 89.9  | 73.8                               | less-open  |
| 33.37                   | 287.5   | 73.5                               | less-open  |
| 34.23                   | 298.4   | 76.8                               | less-open  |
| 34.57                   | 328.7   | 63.4                               | less-open  |
| 35.30                   | 292.2   | 46.1                               | less-open  |
| 35.59                   | 105.1   | 48.3                               | less-open  |
| 35.64                   | 318.2   | 55.7                               | less-open  |
| 35.81                   | 311.9   | 21.7                               | less-open  |
| 36.08                   | 303.6   | 53.3                               | less-open  |
| 36.37                   | 311.8   | 47.1                               | less-open  |
| 36.53                   | 307.1   | 53.3                               | less-open  |
| 36.73                   | 87.2  | 69.4                               | less-open  |
| 36.79                   | 312.2   | 44.7                               | less-open  |
| 36.97                   | 287.1   | 47.9                               | less-open  |
| 37.16                   | 307.1   | 42.9                               | less-open  |
| 38.09                   | 317.2   | 42.2                               | less-open  |
| 38.31                   | 316.3   | 56.1                               | less-open  |
| 38.45                   | 126.8   | 77.5                               | less-open  |
| 38.76                   | 306.4   | 66.3                               | less-open  |
| 38.85                   | 320.7   | 65.4                               | less-open  |
| 38.96                   | 311.7   | 63.9                               | less-open  |
| 39.15                   | 306.6   | 32.2                               | less-open  |
| 39.38                   | 325.6   | 53.3                               | less-open  |
| 39.64                   | 316.6   | 62.8                               | less-open  |
| 39.80                   | 322.6   | 65.5                               | less-open  |
| 40.03                   | 125.5   | 76.3                               | less-open  |
| 40.7                    | 215.86  | 52.44                              | less-open  |
| 41.35                   | 57.99   | 39.92                              | less-open  |
| 41.44                   | 214.6   | 46.7                               | less-open  |
| 42.13                   | 121.6   | 57.1                               | less-open  |
| 43.03                   | 30.7  | 15.2                               | less-open  |
| 43.06                   | 312.4   | 74.4                               | less-open  |
| 43.26                   | 324.9   | 28.7                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 43.37                   | 290.4   | 67.5                               | less-open  |
| 43.66                   | 115.8   | 52.1                               | less-open  |
| 43.78                   | 83.3  | 82.9                               | less-open  |
| 43.84                   | 92.6  | 53.7                               | less-open  |
| 44.11                   | 72.2  | 66.9                               | less-open  |
| 44.13                   | 349.5   | 76.3                               | less-open  |
| 44.33                   | 85.8  | 78.0                               | less-open  |
| 44.91                   | 327.7   | 89.7                               | less-open  |
| 45.17                   | 309.9   | 89.3                               | less-open  |
| 45.73                   | 305.7   | 89.7                               | less-open  |

Fracture Orientations Interpreted from MW-58 Acoustic Televiewer Log  
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 Prepared for: GZA  
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| depth<br>(feet) | down-dip<br>compass<br>azimuth<br>(degrees) | dip<br>angle<br>(degrees) | interpreted<br>planar<br>feature<br>category |
|-----------------|---|---------------------------|--|
| 16.76           | 344.0                                       | 36.5                      | less-open                                    |
| 16.95           | 340.6                                       | 42.7                      | less-open                                    |
| 17.41           | 171.3                                       | 66.7                      | less-open                                    |
| 17.82           | 357.3                                       | 67.1                      | less-open                                    |
| 17.99           | 349.1                                       | 58.7                      | less-open                                    |
| 18.30           | 11.6  | 53.0                      | less-open                                    |
| 18.72           | 204.5                                       | 72.9                      | less-open                                    |
| 18.75           | 20.8  | 32.8                      | less-open                                    |
| 18.86           | 3.6   | 67.5                      | less-open                                    |
| 19.14           | 15.5  | 29.9                      | less-open                                    |
| 19.28           | 352.8                                       | 34.8                      | less-open                                    |
| 19.43           | 344.0                                       | 29.1                      | open   |
| 19.96           | 164.5                                       | 66.1                      | less-open                                    |
| 20.28           | 335.1                                       | 57.0                      | less-open                                    |
| 20.34           | 162.4                                       | 70.2                      | less-open                                    |
| 20.53           | 170.9                                       | 62.2                      | less-open                                    |
| 20.64           | 340.2                                       | 35.2                      | less-open                                    |
| 20.94           | 158.1                                       | 65.8                      | less-open                                    |
| 21.03           | 345.1                                       | 31.5                      | less-open                                    |
| 21.11           | 351.1                                       | 34.7                      | less-open                                    |
| 21.30           | 351.7                                       | 41.8                      | less-open                                    |
| 21.56           | 342.8                                       | 41.9                      | open   |
| 21.81           | 354.9                                       | 39.1                      | less-open                                    |
| 21.97           | 343.2                                       | 39.8                      | less-open                                    |
| 22.40           | 314.6                                       | 55.7                      | less-open                                    |
| 22.94           | 320.7                                       | 26.7                      | less-open                                    |
| 23.23           | 307.1                                       | 49.5                      | less-open                                    |
| 23.38           | 133.0                                       | 73.2                      | less-open                                    |
| 23.49           | 333.7                                       | 49.8                      | less-open                                    |
| 23.92           | 325.0                                       | 45.9                      | less-open                                    |
| 24.04           | 118.5                                       | 71.6                      | less-open                                    |
| 24.40           | 319.2                                       | 43.7                      | less-open                                    |
| 25.06           | 121.2                                       | 63.5                      | less-open                                    |
| 25.10           | 326.9                                       | 63.3                      | less-open                                    |
| 25.16           | 338.6                                       | 56.7                      | less-open                                    |
| 25.31           | 117.1                                       | 68.6                      | less-open                                    |
| 25.38           | 328.5                                       | 61.5                      | less-open                                    |
| 26.18           | 317.0                                       | 61.1                      | less-open                                    |
| 26.28           | 322.3                                       | 45.0                      | less-open                                    |
| 26.46           | 342.8                                       | 46.6                      | less-open                                    |
| 26.94           | 120.7                                       | 65.7                      | less-open                                    |
| 27.37           | 345.2                                       | 58.7                      | less-open                                    |
| 28.08           | 341.1                                       | 59.6                      | less-open                                    |
| 28.36           | 176.3                                       | 62.7                      | less-open                                    |

Note that down-dip compass azimuth is perpendicular to the strike direction.

Note that interpreted down-dip compass azimuths are with respect to magnetic north.

Down-dip azimuths & dip angles were corrected for borehole deviation from vertical.

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 28.98                   | 339.7   | 58.4                               | less-open  |
| 29.42                   | 328.8   | 40.7                               | less-open  |
| 30.06                   | 319.5   | 43.1                               | less-open  |
| 30.77                   | 312.6   | 42.0                               | less-open  |
| 31.20                   | 149.6   | 64.0                               | less-open  |
| 32.00                   | 311.1   | 36.1                               | less-open  |
| 32.46                   | 313.7   | 32.7                               | less-open  |
| 33.06                   | 290.8   | 35.1                               | less-open  |
| 33.20                   | 300.3   | 28.6                               | less-open  |
| 33.56                   | 310.0   | 32.1                               | less-open  |
| 34.03                   | 339.91  | 41.14                              | less-open  |
| 34.37                   | 132.58  | 60.75                              | less-open  |
| 34.68                   | 282.7   | 29.2                               | less-open  |
| 35.02                   | 113.0   | 66.1                               | less-open  |
| 35.37                   | 102.5   | 62.2                               | less-open  |
| 35.84                   | 100.5   | 67.9                               | less-open  |
| 35.92                   | 332.5   | 66.3                               | less-open  |
| 36.38                   | 312.3   | 43.3                               | less-open  |
| 36.52                   | 111.3   | 64.8                               | less-open  |
| 36.60                   | 302.6   | 53.1                               | less-open  |
| 37.10                   | 312.6   | 45.5                               | less-open  |
| 37.22                   | 326.6   | 40.7                               | less-open  |
| 37.58                   | 323.4   | 39.8                               | less-open  |
| 38.17                   | 314.9   | 50.4                               | less-open  |
| 38.25                   | 314.7   | 47.1                               | less-open  |
| 38.40                   | 311.2   | 58.6                               | less-open  |
| 38.82                   | 332.8   | 32.9                               | less-open  |
| 39.06                   | 95.3  | 70.2                               | less-open  |
| 39.22                   | 298.1   | 40.0                               | less-open  |
| 39.54                   | 297.3   | 47.8                               | less-open  |
| 39.94                   | 327.2   | 56.5                               | less-open  |
| 40.08                   | 96.7  | 70.8                               | less-open  |
| 40.62                   | 94.2  | 70.8                               | less-open  |
| 41.16                   | 313.6   | 32.5                               | less-open  |
| 41.35                   | 78.7  | 70.7                               | less-open  |
| 41.53                   | 296.7   | 24.6                               | less-open  |
| 42.27                   | 305.6   | 52.1                               | less-open  |
| 42.70                   | 333.9   | 42.2                               | less-open  |
| 43.04                   | 301.5   | 47.4                               | less-open  |
| 43.16                   | 295.0   | 52.6                               | less-open  |
| 43.74                   | 316.6   | 46.6                               | less-open  |
| 44.46                   | 101.8   | 63.02                              | less-open  |
| 44.5                    | 335.9   | 45.32                              | less-open  |
| 45.32                   | 342.3   | 39.0                               | less-open  |

Fracture Orientations Interpreted from MW-58 Acoustic Televiewer Log  
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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 46.27                   | 301.2   | 40.8                               | less-open  |
| 46.98                   | 310.0   | 34.9                               | less-open  |
| 48.89                   | 351.1   | 22.6                               | less-open  |
| 52.82                   | 96.6  | 58.6                               | less-open  |
| 53.46                   | 107.2   | 65.3                               | less-open  |
| 53.77                   | 107.0   | 65.8                               | less-open  |
| 54.36                   | 305.0   | 38.6                               | open   |
| 56.84                   | 290.2   | 40.6                               | less-open  |
| 57.63                   | 295.5   | 50.2                               | less-open  |
| 58.41                   | 162.9   | 73.1                               | less-open  |
| 59.02                   | 105.5   | 63.5                               | less-open  |
| 59.22                   | 302.9   | 61.9                               | less-open  |
| 59.63                   | 282.8   | 64.5                               | less-open  |
| 60.77                   | 297.1   | 61.0                               | less-open  |
| 60.99                   | 101.8   | 66.7                               | less-open  |
| 61.41                   | 122.4   | 63.8                               | less-open  |
| 61.77                   | 103.0   | 67.9                               | less-open  |
| 63.25                   | 301.09  | 37.77                              | less-open  |
| 64.06                   | 71.9  | 66.14                              | less-open  |
| 64.34                   | 143.2   | 63.6                               | less-open  |
| 64.38                   | 319.0   | 35.9                               | less-open  |
| 64.81                   | 291.8   | 41.4                               | less-open  |
| 64.92                   | 181.4   | 67.9                               | less-open  |
| 65.13                   | 177.0   | 69.9                               | less-open  |
| 65.22                   | 170.8   | 68.1                               | less-open  |
| 65.71                   | 178.8   | 70.2                               | less-open  |
| 65.96                   | 323.2   | 53.5                               | less-open  |
| 66.21                   | 110.7   | 61.3                               | less-open  |
| 66.33                   | 107.7   | 65.6                               | less-open  |
| 66.68                   | 288.1   | 55.7                               | less-open  |
| 66.94                   | 111.8   | 59.3                               | less-open  |
| 67.26                   | 115.3   | 67.2                               | less-open  |
| 67.89                   | 100.5   | 69.9                               | less-open  |
| 67.96                   | 108.1   | 71.0                               | less-open  |
| 68.07                   | 305.7   | 53.9                               | less-open  |
| 68.28                   | 108.8   | 72.9                               | less-open  |
| 68.93                   | 95.9  | 65.1                               | less-open  |
| 70.24                   | 192.9   | 6.4                                | less-open  |

Fracture Orientations Interpreted from MW-59 Acoustic Televiewer Log  
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 Buchanan, NY  
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| depth<br>(feet) | down-dip<br>compass<br>azimuth<br>(degrees) | dip<br>angle<br>(degrees) | interpreted<br>planar<br>feature<br>category |
|-----------------|---|---------------------------|--|
| 20.77           | 253.8                                       | 29.3                      | open   |
| 21.69           | 221.7                                       | 62.6                      | less-open                                    |
| 21.76           | 213.1                                       | 72.2                      | less-open                                    |
| 23.51           | 225.7                                       | 60.8                      | open   |
| 23.68           | 217.0                                       | 69.7                      | less-open                                    |
| 24.14           | 220.2                                       | 78.0                      | less-open                                    |
| 24.14           | 219.1                                       | 75.4                      | less-open                                    |
| 24.43           | 132.3                                       | 48.1                      | less-open                                    |
| 24.77           | 354.0                                       | 50.4                      | less-open                                    |
| 24.99           | 207.9                                       | 77.2                      | less-open                                    |
| 25.11           | 357.9                                       | 45.9                      | less-open                                    |
| 25.19           | 150.9                                       | 41.4                      | less-open                                    |
| 25.33           | 135.7                                       | 34.0                      | less-open                                    |
| 25.51           | 147.6                                       | 51.7                      | less-open                                    |
| 26.12           | 142.0                                       | 57.0                      | less-open                                    |
| 26.19           | 147.3                                       | 58.4                      | less-open                                    |
| 26.79           | 188.0                                       | 84.0                      | less-open                                    |
| 26.88           | 135.2                                       | 59.9                      | less-open                                    |
| 26.94           | 324.5                                       | 39.0                      | less-open                                    |
| 27.18           | 284.7                                       | 46.2                      | less-open                                    |
| 27.25           | 141.6                                       | 37.0                      | less-open                                    |
| 27.30           | 187.5                                       | 85.0                      | less-open                                    |
| 27.34           | 129.3                                       | 48.1                      | less-open                                    |
| 27.99           | 123.9                                       | 59.1                      | less-open                                    |
| 28.14           | 159.0                                       | 46.2                      | less-open                                    |
| 28.45           | 229.4                                       | 47.1                      | less-open                                    |
| 28.83           | 132.6                                       | 65.8                      | less-open                                    |
| 29.09           | 135.8                                       | 51.6                      | less-open                                    |
| 29.40           | 120.2                                       | 53.7                      | less-open                                    |
| 29.43           | 317.1                                       | 38.4                      | open   |
| 29.81           | 141.3                                       | 54.8                      | less-open                                    |
| 30.13           | 324.8                                       | 43.2                      | open   |
| 30.19           | 148.0                                       | 61.5                      | less-open                                    |
| 30.43           | 313.3                                       | 41.8                      | open   |
| 30.56           | 317.5                                       | 45.1                      | less-open                                    |
| 31.17           | 195.2                                       | 41.0                      | less-open                                    |
| 31.54           | 183.5                                       | 38.5                      | less-open                                    |
| 31.78           | 304.2                                       | 45.4                      | less-open                                    |
| 32.04           | 305.6                                       | 46.4                      | less-open                                    |
| 32.15           | 114.5                                       | 65.7                      | less-open                                    |
| 32.34           | 120.6                                       | 57.4                      | less-open                                    |
| 32.46           | 120.9                                       | 58.8                      | less-open                                    |
| 32.59           | 211.3                                       | 64.0                      | less-open                                    |
| 32.83           | 123.8                                       | 68.3                      | less-open                                    |

Note that down-dip compass azimuth is perpendicular to the strike direction.

Note that interpreted down-dip compass azimuths are with respect to magnetic north.

Down-dip azimuths & dip angles were corrected for borehole deviation from vertical.

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 33.54                   | 127.6   | 45.9                               | less-open  |
| 34.06                   | 204.3   | 63.6                               | less-open  |
| 34.16                   | 7.1   | 63.4                               | less-open  |
| 34.27                   | 199.7   | 46.9                               | less-open  |
| 34.99                   | 340.4   | 69.6                               | less-open  |
| 35.68                   | 182.9   | 55.9                               | less-open  |
| 36.78                   | 116.3   | 60.4                               | less-open  |
| 37.07                   | 189.0   | 59.3                               | less-open  |
| 37.63                   | 137.0   | 55.1                               | less-open  |
| 37.88                   | 132.2   | 56.9                               | less-open  |
| 38.22                   | 198.2   | 70.9                               | less-open  |
| 38.64                   | 175.4   | 62.1                               | less-open  |
| 39.66                   | 165.5   | 42.6                               | less-open  |
| 41.65                   | 339.1   | 43.9                               | less-open  |
| 42.24                   | 212.49  | 15.37                              | less-open  |
| 42.47                   | 254.48  | 49.31                              | less-open  |
| 42.79                   | 156.3   | 54.4                               | less-open  |
| 42.90                   | 157.8   | 45.8                               | less-open  |
| 43.11                   | 146.5   | 23.5                               | less-open  |
| 43.37                   | 120.2   | 47.9                               | less-open  |
| 43.47                   | 180.5   | 18.6                               | less-open  |
| 43.52                   | 197.0   | 66.7                               | less-open  |
| 43.68                   | 179.6   | 40.7                               | less-open  |
| 44.60                   | 182.0   | 45.7                               | less-open  |
| 44.66                   | 214.0   | 14.0                               | less-open  |
| 45.10                   | 195.7   | 65.7                               | less-open  |
| 45.95                   | 167.4   | 51.6                               | less-open  |
| 46.44                   | 325.3   | 50.5                               | less-open  |
| 46.44                   | 186.8   | 38.4                               | less-open  |
| 46.69                   | 208.9   | 60.7                               | less-open  |
| 47.60                   | 338.7   | 42.2                               | less-open  |
| 47.99                   | 329.3   | 45.2                               | less-open  |
| 48.25                   | 135.7   | 55.0                               | less-open  |
| 48.37                   | 157.4   | 59.2                               | less-open  |
| 48.46                   | 322.6   | 43.1                               | less-open  |
| 48.67                   | 140.6   | 56.8                               | less-open  |
| 49.41                   | 310.2   | 35.3                               | less-open  |
| 49.75                   | 305.3   | 36.4                               | less-open  |
| 50.23                   | 343.3   | 42.2                               | less-open  |
| 50.41                   | 328.9   | 40.3                               | less-open  |
| 50.57                   | 211.7   | 45.0                               | less-open  |
| 50.93                   | 135.0   | 48.0                               | less-open  |
| 51.43                   | 332.3   | 42.3                               | less-open  |
| 51.65                   | 323.8   | 30.0                               | less-open  |



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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 51.78                   | 320.0   | 42.8                               | less-open  |
| 52.16                   | 314.36  | 42.53                              | less-open  |
| 52.49                   | 203.3   | 60.67                              | less-open  |
| 52.93                   | 320.0   | 36.1                               | less-open  |
| 53.06                   | 193.1   | 66.2                               | less-open  |
| 53.31                   | 338.0   | 39.4                               | less-open  |
| 53.48                   | 319.9   | 36.0                               | less-open  |
| 54.20                   | 324.8   | 34.5                               | less-open  |
| 55.03                   | 213.7   | 71.5                               | less-open  |
| 55.31                   | 203.4   | 70.2                               | less-open  |
| 55.44                   | 326.6   | 35.9                               | less-open  |
| 55.49                   | 208.0   | 66.2                               | less-open  |
| 55.66                   | 297.7   | 31.1                               | less-open  |
| 56.74                   | 311.9   | 18.1                               | less-open  |
| 57.18                   | 330.7   | 39.2                               | less-open  |
| 57.30                   | 318.3   | 33.7                               | less-open  |
| 57.46                   | 324.0   | 47.3                               | less-open  |
| 57.80                   | 189.0   | 74.8                               | less-open  |
| 58.15                   | 319.6   | 26.6                               | less-open  |
| 58.23                   | 312.2   | 31.6                               | less-open  |
| 58.27                   | 309.7   | 48.4                               | less-open  |
| 58.42                   | 314.4   | 36.1                               | less-open  |
| 58.76                   | 186.1   | 56.0                               | less-open  |
| 59.88                   | 335.6   | 36.2                               | less-open  |
| 60.12                   | 351.1   | 40.1                               | less-open  |
| 60.31                   | 329.1   | 33.6                               | less-open  |
| 60.42                   | 340.0   | 38.4                               | less-open  |
| 60.64                   | 184.3   | 73.4                               | less-open  |
| 60.66                   | 323.3   | 34.6                               | less-open  |
| 61.01                   | 104.0   | 71.5                               | less-open  |
| 61.48                   | 116.1   | 66.1                               | less-open  |
| 61.96                   | 328.3   | 40.4                               | less-open  |
| 62.14                   | 144.1   | 62.3                               | less-open  |
| 62.6                    | 12.0  | 9.6                                | less-open  |
| 62.94                   | 310.4   | 22.3                               | less-open  |
| 63.2                    | 134.8   | 66.7                               | less-open  |
| 63.23                   | 313.5   | 51.3                               | less-open  |
| 63.81                   | 123.0   | 26.0                               | less-open  |
| 65.41                   | 297.1   | 30.2                               | less-open  |
| 65.5                    | 301.1   | 31.0                               | less-open  |
| 67.42                   | 158.5   | 60.1                               | less-open  |
| 67.66                   | 320.2   | 40.3                               | less-open  |
| 67.92                   | 321.8   | 41.2                               | less-open  |
| 68.12                   | 318.8   | 41.3                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 70.44                   | 321.5   | 44.9                               | less-open  |
| 70.83                   | 305.9   | 45.6                               | less-open  |
| 70.92                   | 310.8   | 45.1                               | less-open  |
| 70.98                   | 312.44  | 47.62                              | less-open  |
| 71.18                   | 317.72  | 39.27                              | less-open  |
| 71.32                   | 306.7   | 41.6                               | less-open  |
| 71.44                   | 306.6   | 37.3                               | less-open  |
| 72.32                   | 304.0   | 39.4                               | less-open  |
| 73.58                   | 120.6   | 61.9                               | less-open  |
| 73.71                   | 33.5  | 13.6                               | less-open  |
| 74.25                   | 315.6   | 22.7                               | less-open  |
| 74.72                   | 304.5   | 29.3                               | less-open  |
| 75.17                   | 341.8   | 87.4                               | less-open  |
| 76.25                   | 315.8   | 87.6                               | less-open  |

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| depth<br>(feet) | down-dip<br>compass<br>azimuth<br>(degrees) | dip<br>angle<br>(degrees) | interpreted<br>planar<br>feature<br>category |
|-----------------|---|---------------------------|--|
| 10.40           | 296.3                                       | 36.1                      | less-open                                    |
| 11.96           | 104.0                                       | 35.7                      | less-open                                    |
| 12.08           | 300.3                                       | 50.7                      | less-open                                    |
| 13.20           | 304.0                                       | 38.7                      | less-open                                    |
| 14.40           | 275.6                                       | 62.4                      | less-open                                    |
| 14.49           | 143.9                                       | 34.6                      | less-open                                    |
| 16.02           | 103.6                                       | 57.7                      | less-open                                    |
| 16.86           | 115.8                                       | 59.7                      | less-open                                    |
| 18.00           | 282.9                                       | 61.1                      | less-open                                    |
| 19.74           | 37.5  | 49.1                      | less-open                                    |
| 20.11           | 249.5                                       | 31.2                      | less-open                                    |
| 20.46           | 112.6                                       | 47.3                      | less-open                                    |
| 22.94           | 315.4                                       | 51.9                      | less-open                                    |
| 27.05           | 134.0                                       | 35.0                      | less-open                                    |
| 29.75           | 99.8  | 53.9                      | less-open                                    |
| 36.27           | 221.8                                       | 56.7                      | less-open                                    |
| 36.47           | 331.5                                       | 61.0                      | less-open                                    |
| 36.99           | 302.7                                       | 48.2                      | open   |
| 37.39           | 323.2                                       | 39.3                      | less-open                                    |
| 38.54           | 24.7  | 13.4                      | less-open                                    |
| 39.31           | 118.5                                       | 63.4                      | less-open                                    |
| 39.73           | 110.4                                       | 59.4                      | less-open                                    |
| 40.60           | 125.3                                       | 72.0                      | less-open                                    |
| 43.20           | 205.1                                       | 57.5                      | less-open                                    |
| 49.41           | 132.4                                       | 45.1                      | less-open                                    |
| 50.09           | 147.4                                       | 86.1                      | less-open                                    |
| 52.30           | 313.7                                       | 42.3                      | less-open                                    |
| 52.64           | 9.1   | 31.1                      | less-open                                    |
| 52.82           | 336.8                                       | 41.9                      | less-open                                    |
| 53.12           | 354.1                                       | 61.8                      | less-open                                    |
| 53.64           | 331.3                                       | 23.5                      | less-open                                    |
| 54.14           | 273.9                                       | 67.7                      | less-open                                    |
| 54.14           | 258.6                                       | 59.2                      | less-open                                    |
| 54.42           | 341.7                                       | 22.1                      | open   |
| 55.83           | 324.8                                       | 58.6                      | open   |
| 55.86           | 253.8                                       | 4.9                       | less-open                                    |
| 56.89           | 325.8                                       | 42.0                      | less-open                                    |
| 57.06           | 303.9                                       | 58.3                      | less-open                                    |
| 57.62           | 326.3                                       | 73.2                      | less-open                                    |
| 58.23           | 327.4                                       | 74.8                      | less-open                                    |
| 58.78           | 336.8                                       | 77.8                      | less-open                                    |
| 59.00           | 351.8                                       | 76.3                      | less-open                                    |
| 60.03           | 306.9                                       | 52.6                      | less-open                                    |
| 60.07           | 147.5                                       | 52.1                      | less-open                                    |

Note that down-dip compass azimuth is perpendicular to the strike direction.

Note that interpreted down-dip compass azimuths are with respect to magnetic north.

Down-dip azimuths & dip angles were corrected for borehole deviation from vertical.

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 60.65                   | 336.8   | 61.9                               | less-open  |
| 60.67                   | 148.9   | 70.3                               | less-open  |
| 61.21                   | 109.9   | 36.2                               | less-open  |
| 61.99                   | 330.3   | 53.0                               | less-open  |
| 62.23                   | 325.0   | 59.4                               | less-open  |
| 63.97                   | 307.1   | 63.1                               | less-open  |
| 64.16                   | 325.5   | 68.7                               | less-open  |
| 64.25                   | 311.8   | 49.4                               | less-open  |
| 64.32                   | 201.8   | 67.6                               | less-open  |
| 64.33                   | 298.9   | 45.9                               | less-open  |
| 65.01                   | 197.35  | 72.97                              | less-open  |
| 65.45                   | 312.86  | 63.37                              | less-open  |
| 66.44                   | 307.7   | 63.6                               | less-open  |
| 68.01                   | 323.4   | 77.1                               | less-open  |
| 68.29                   | 300.2   | 74.1                               | less-open  |
| 69.39                   | 126.8   | 42.4                               | less-open  |
| 69.59                   | 131.2   | 39.7                               | less-open  |
| 69.83                   | 292.7   | 67.5                               | less-open  |
| 70.53                   | 309.2   | 70.3                               | less-open  |
| 70.67                   | 103.4   | 53.9                               | less-open  |
| 71.50                   | 323.6   | 70.7                               | less-open  |
| 71.80                   | 319.6   | 63.5                               | less-open  |
| 72.77                   | 319.5   | 60.2                               | less-open  |
| 73.78                   | 324.9   | 59.6                               | less-open  |
| 74.10                   | 309.6   | 61.8                               | less-open  |
| 74.40                   | 274.5   | 67.2                               | less-open  |
| 74.83                   | 80.5  | 15.5                               | less-open  |
| 74.95                   | 185.8   | 65.6                               | less-open  |
| 75.20                   | 186.9   | 68.5                               | less-open  |
| 75.96                   | 315.5   | 46.2                               | less-open  |
| 76.39                   | 323.4   | 42.6                               | less-open  |
| 77.23                   | 353.9   | 17.3                               | less-open  |
| 77.34                   | 38.5  | 21.2                               | less-open  |
| 78.12                   | 284.1   | 68.3                               | less-open  |
| 78.69                   | 220.5   | 79.9                               | less-open  |
| 84.49                   | 318.3   | 48.1                               | less-open  |
| 84.71                   | 324.9   | 56.1                               | less-open  |
| 85.36                   | 303.7   | 48.1                               | less-open  |
| 90.85                   | 31.4  | 31.4                               | less-open  |
| 91.38                   | 158.4   | 73.3                               | less-open  |
| 91.64                   | 310.8   | 32.4                               | less-open  |
| 92.9                    | 169.38  | 80.19                              | less-open  |
| 93.3                    | 191.92  | 32.75                              | less-open  |
| 93.73                   | 172.1   | 66.6                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 93.81                   | 232.1   | 45.3                               | less-open  |
| 94.97                   | 303.6   | 39.1                               | less-open  |
| 95.18                   | 195.9   | 53.5                               | less-open  |
| 95.39                   | 98.1  | 77.3                               | less-open  |
| 96.46                   | 327.0   | 44.5                               | less-open  |
| 98.00                   | 288.1   | 68.1                               | less-open  |
| 98.23                   | 311.6   | 69.6                               | less-open  |
| 99.24                   | 313.0   | 66.3                               | less-open  |
| 99.43                   | 341.8   | 64.4                               | less-open  |
| 100.51                  | 267.9   | 67.9                               | less-open  |
| 100.83                  | 135.4   | 58.0                               | less-open  |
| 101.41                  | 158.3   | 26.9                               | less-open  |
| 102.04                  | 151.1   | 31.3                               | less-open  |
| 102.54                  | 192.9   | 67.8                               | less-open  |
| 102.94                  | 191.2   | 79.4                               | less-open  |
| 103.87                  | 209.9   | 81.2                               | less-open  |
| 104.51                  | 357.4   | 49.7                               | less-open  |
| 104.85                  | 344.1   | 46.6                               | less-open  |
| 107.14                  | 93.6  | 67.0                               | less-open  |
| 107.23                  | 139.0   | 44.3                               | less-open  |
| 107.82                  | 94.5  | 19.7                               | less-open  |
| 108.3                   | 126.3   | 27.6                               | less-open  |
| 108.86                  | 334.8   | 76.3                               | less-open  |
| 109.35                  | 309.5   | 70.1                               | less-open  |
| 110.23                  | 319.3   | 58.7                               | less-open  |
| 110.43                  | 311.4   | 58.7                               | less-open  |
| 110.61                  | 313.3   | 59.5                               | less-open  |
| 111.11                  | 192.3   | 31.1                               | less-open  |
| 111.35                  | 150.0   | 33.6                               | less-open  |
| 111.84                  | 167.5   | 66.4                               | less-open  |
| 112.38                  | 148.7   | 65.4                               | less-open  |
| 113.09                  | 307.1   | 32.5                               | less-open  |
| 113.72                  | 329.2   | 31.4                               | less-open  |
| 114.14                  | 111.6   | 55.3                               | less-open  |
| 116.59                  | 14.3  | 53.0                               | less-open  |
| 116.89                  | 99.6  | 66.8                               | less-open  |
| 117.53                  | 117.0   | 44.7                               | less-open  |
| 117.91                  | 117.7   | 37.1                               | less-open  |
| 118.37                  | 139.2   | 38.5                               | less-open  |
| 118.62                  | 120.6   | 46.7                               | less-open  |
| 119.19                  | 329.5   | 73.8                               | less-open  |
| 119.59                  | 145.6   | 50.4                               | less-open  |
| 119.87                  | 143.2   | 36.5                               | less-open  |
| 120.16                  | 120.86  | 29.75                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 120.64                  | 118.02  | 67.72                              | less-open  |
| 122.21                  | 136.9   | 29.9                               | less-open  |
| 122.37                  | 123.2   | 41.5                               | less-open  |
| 122.54                  | 126.0   | 29.7                               | less-open  |
| 122.7                   | 146.6   | 35.6                               | less-open  |
| 122.93                  | 131.4   | 33.7                               | less-open  |
| 123.15                  | 130.8   | 42.4                               | less-open  |
| 123.35                  | 126.0   | 29.9                               | less-open  |
| 125.48                  | 118.1   | 57.0                               | less-open  |
| 126.31                  | 139.8   | 35.1                               | less-open  |
| 127.91                  | 141.48  | 38.06                              | less-open  |
| 128.72                  | 332.45  | 58.01                              | less-open  |
| 128.78                  | 144.1   | 40.2                               | less-open  |
| 129.39                  | 155.9   | 53.1                               | less-open  |
| 129.83                  | 133.6   | 46.7                               | less-open  |
| 131.48                  | 119.5   | 28.8                               | less-open  |
| 133.43                  | 165.6   | 33.2                               | less-open  |
| 135.7                   | 132.4   | 56.3                               | less-open  |
| 136.57                  | 143.5   | 33.1                               | open   |
| 136.69                  | 122.1   | 31.3                               | open   |
| 136.82                  | 123.7   | 30.3                               | less-open  |
| 137.19                  | 132.7   | 45.3                               | less-open  |
| 137.34                  | 119.4   | 46.6                               | less-open  |
| 137.87                  | 146.9   | 33.0                               | less-open  |
| 138.06                  | 176.7   | 26.3                               | less-open  |
| 139.39                  | 150.8   | 33.4                               | less-open  |
| 140.27                  | 131.2   | 34.9                               | less-open  |
| 140.74                  | 133.9   | 34.2                               | less-open  |
| 141.43                  | 106.5   | 40.4                               | less-open  |
| 142.39                  | 141.5   | 33.0                               | less-open  |
| 142.5                   | 142.2   | 28.7                               | less-open  |
| 142.63                  | 149.9   | 27.8                               | less-open  |
| 142.94                  | 137.2   | 30.1                               | less-open  |
| 145.3                   | 127.9   | 31.1                               | less-open  |
| 145.38                  | 130.2   | 30.1                               | less-open  |
| 146.06                  | 151.5   | 33.2                               | less-open  |
| 146.73                  | 137.1   | 34.0                               | less-open  |
| 148.94                  | 321.3   | 80.5                               | less-open  |
| 149.76                  | 133.2   | 33.0                               | less-open  |
| 150.12                  | 129.0   | 35.1                               | less-open  |
| 150.35                  | 130.7   | 38.7                               | less-open  |
| 150.46                  | 119.7   | 35.2                               | less-open  |
| 150.58                  | 116.2   | 42.8                               | less-open  |
| 151.1                   | 157.0   | 37.2                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 151.51                  | 158.6   | 36.7                               | less-open  |
| 151.62                  | 150.1   | 34.3                               | less-open  |
| 151.68                  | 146.2   | 31.7                               | less-open  |
| 151.84                  | 143.7   | 30.2                               | less-open  |
| 152.01                  | 143.4   | 35.1                               | less-open  |
| 152.55                  | 144.5   | 38.7                               | less-open  |
| 152.81                  | 141.9   | 37.6                               | less-open  |
| 153.39                  | 134.3   | 39.4                               | less-open  |
| 153.46                  | 147.9   | 37.8                               | less-open  |
| 153.74                  | 140.9   | 38.9                               | less-open  |
| 155.22                  | 117.0   | 45.1                               | less-open  |
| 155.58                  | 128.6   | 51.7                               | less-open  |
| 155.66                  | 342.4   | 34.3                               | less-open  |
| 155.86                  | 124.9   | 35.6                               | open   |
| 156.17                  | 142.8   | 35.7                               | less-open  |
| 156.49                  | 123.4   | 45.6                               | less-open  |
| 156.91                  | 152.7   | 38.7                               | less-open  |
| 157.09                  | 142.1   | 37.2                               | less-open  |
| 158.08                  | 133.7   | 42.1                               | less-open  |
| 158.3                   | 320.2   | 70.8                               | less-open  |
| 158.42                  | 115.2   | 48.3                               | less-open  |
| 158.9                   | 104.4   | 60.3                               | less-open  |
| 159.11                  | 95.3  | 75.4                               | less-open  |
| 160.01                  | 99.7  | 77.5                               | less-open  |
| 160.54                  | 305.9   | 42.2                               | less-open  |
| 160.83                  | 93.4  | 77.3                               | less-open  |
| 162.32                  | 312.4   | 46.4                               | less-open  |
| 162.55                  | 4.4   | 26.0                               | less-open  |
| 163.17                  | 118.2   | 49.93                              | less-open  |
| 163.43                  | 115.25  | 61.31                              | less-open  |
| 163.81                  | 310.1   | 48.5                               | less-open  |
| 163.92                  | 105.7   | 58.3                               | less-open  |
| 164.64                  | 323.3   | 74.6                               | less-open  |
| 165.75                  | 3.0   | 45.2                               | less-open  |
| 166.1                   | 131.9   | 48.6                               | less-open  |
| 166.44                  | 150.5   | 46.7                               | less-open  |
| 166.79                  | 230.8   | 30.3                               | less-open  |
| 166.87                  | 240.9   | 30.3                               | less-open  |
| 167.59                  | 141.5   | 25.5                               | less-open  |
| 167.96                  | 168.2   | 29.5                               | less-open  |
| 168.6                   | 164.2   | 33.4                               | less-open  |
| 169.15                  | 147.4   | 37.3                               | less-open  |
| 169.76                  | 137.2   | 36.0                               | less-open  |
| 170.01                  | 140.3   | 46.1                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 170.5                   | 179.7   | 38.7                               | less-open  |
| 171.33                  | 165.6   | 35.5                               | less-open  |
| 172.15                  | 135.5   | 42.0                               | less-open  |
| 172.77                  | 340.7   | 32.7                               | less-open  |
| 173.92                  | 123.0   | 34.3                               | less-open  |
| 174.02                  | 160.0   | 40.8                               | open   |
| 174.25                  | 7.8   | 53.2                               | less-open  |
| 174.31                  | 100.4   | 35.5                               | less-open  |
| 174.67                  | 135.3   | 44.5                               | less-open  |
| 174.92                  | 128.2   | 41.4                               | less-open  |
| 175.11                  | 151.7   | 34.5                               | less-open  |
| 175.79                  | 179.4   | 51.3                               | less-open  |
| 176.98                  | 193.5   | 40.0                               | less-open  |
| 177.26                  | 127.4   | 47.1                               | less-open  |
| 177.75                  | 121.6   | 44.9                               | less-open  |
| 178.07                  | 108.3   | 50.0                               | open   |
| 178.31                  | 111.9   | 45.7                               | open   |
| 179.73                  | 336.4   | 54.6                               | less-open  |
| 180.35                  | 123.4   | 54.8                               | less-open  |
| 180.85                  | 263.5   | 66.5                               | less-open  |
| 182.89                  | 268.7   | 78.7                               | less-open  |
| 184.41                  | 123.3   | 63.0                               | less-open  |
| 186.09                  | 219.5   | 33.0                               | less-open  |
| 186.31                  | 264.8   | 67.7                               | less-open  |
| 187.15                  | 317.3   | 66.3                               | less-open  |
| 187.83                  | 276.3   | 64.5                               | less-open  |
| 188.27                  | 114.2   | 60.8                               | less-open  |
| 189.48                  | 344.8   | 54.3                               | less-open  |
| 189.98                  | 109.2   | 55.9                               | less-open  |
| 190.74                  | 139.3   | 31.4                               | less-open  |
| 190.91                  | 109.0   | 57.6                               | less-open  |
| 191.56                  | 132.5   | 47.1                               | less-open  |
| 192.04                  | 110.6   | 53.71                              | less-open  |
| 192.27                  | 351.37  | 75.1                               | less-open  |
| 192.91                  | 116.9   | 52.3                               | less-open  |
| 193.4                   | 114.9   | 39.3                               | less-open  |
| 193.65                  | 140.1   | 38.6                               | less-open  |
| 193.71                  | 165.7   | 32.6                               | less-open  |
| 193.9                   | 129.4   | 40.5                               | less-open  |
| 194.13                  | 129.4   | 53.2                               | less-open  |
| 194.41                  | 139.4   | 42.9                               | less-open  |
| 195.27                  | 101.0   | 62.9                               | less-open  |
| 195.54                  | 93.2  | 71.9                               | less-open  |
| 197.4                   | 122.53  | 46.45                              | less-open  |



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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 198.21                  | 230.33  | 27.44                              | less-open  |
| 199.28                  | 162.06  | 53.05                              | less-open  |
| 200.14                  | 116.4   | 89.22                              | less-open  |
| 200.31                  | 152.88  | 89.64                              | less-open  |
| 200.52                  | 233.74  | 88.98                              | less-open  |
| 200.95                  | 121.87  | 89.1                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 43.33                   | 35.9  | 38.3                               | less-open  |
| 43.47                   | 95.5  | 68.3                               | less-open  |
| 44.24                   | 351.6   | 50.0                               | less-open  |
| 44.28                   | 99.9  | 71.1                               | less-open  |
| 44.46                   | 327.2   | 50.8                               | less-open  |
| 44.56                   | 347.2   | 32.2                               | less-open  |
| 44.77                   | 346.3   | 33.4                               | less-open  |
| 44.82                   | 105.2   | 74.2                               | less-open  |
| 45.40                   | 315.6   | 44.6                               | less-open  |
| 45.80                   | 98.5  | 63.9                               | less-open  |
| 46.10                   | 100.7   | 67.0                               | less-open  |
| 46.48                   | 105.9   | 64.3                               | less-open  |
| 46.77                   | 331.1   | 31.5                               | less-open  |
| 47.01                   | 92.8  | 51.8                               | less-open  |
| 47.38                   | 331.4   | 49.6                               | less-open  |
| 47.65                   | 292.9   | 33.8                               | less-open  |
| 47.97                   | 117.7   | 73.2                               | less-open  |
| 47.98                   | 102.3   | 73.0                               | less-open  |
| 48.31                   | 109.2   | 68.9                               | less-open  |
| 48.89                   | 337.6   | 21.2                               | less-open  |
| 49.14                   | 98.5  | 64.8                               | less-open  |
| 49.83                   | 111.8   | 70.0                               | less-open  |
| 50.44                   | 90.0  | 69.5                               | less-open  |
| 50.63                   | 99.3  | 74.3                               | less-open  |
| 51.40                   | 94.9  | 77.7                               | less-open  |
| 51.67                   | 100.1   | 72.2                               | less-open  |
| 52.71                   | 11.7  | 24.5                               | less-open  |
| 52.95                   | 99.0  | 72.4                               | less-open  |
| 53.32                   | 306.1   | 38.7                               | less-open  |
| 53.44                   | 203.3   | 72.9                               | less-open  |
| 53.82                   | 300.6   | 35.3                               | less-open  |
| 53.89                   | 107.9   | 68.9                               | less-open  |
| 54.26                   | 206.8   | 69.2                               | less-open  |
| 54.71                   | 207.4   | 65.3                               | less-open  |
| 54.97                   | 213.7   | 67.6                               | less-open  |
| 55.12                   | 204.9   | 63.8                               | less-open  |
| 55.35                   | 207.2   | 71.4                               | less-open  |
| 55.84                   | 300.8   | 44.9                               | less-open  |
| 56.20                   | 309.6   | 43.1                               | less-open  |
| 56.73                   | 198.6   | 73.3                               | less-open  |
| 57.74                   | 74.2  | 12.2                               | less-open  |
| 58.29                   | 85.2  | 68.2                               | less-open  |
| 58.70                   | 66.5  | 75.5                               | less-open  |
| 58.70                   | 108.1   | 67.7                               | less-open  |

Note that down-dip compass azimuth is perpendicular to the strike direction.

Note that interpreted down-dip compass azimuths are with respect to magnetic north.

Down-dip azimuths & dip angles were corrected for borehole deviation from vertical.

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 59.43                   | 312.0   | 49.1                               | less-open  |
| 60.12                   | 104.9   | 66.7                               | less-open  |
| 60.33                   | 197.2   | 81.0                               | less-open  |
| 60.43                   | 291.01  | 65.26                              | less-open  |
| 61.73                   | 5.58  | 24.04                              | less-open  |
| 62.36                   | 306.8   | 31.7                               | less-open  |
| 62.73                   | 99.58   | 67.95                              | less-open  |
| 63                      | 300.07  | 64.71                              | less-open  |
| 63.61                   | 208.7   | 60.1                               | less-open  |
| 63.84                   | 111.3   | 63.5                               | less-open  |
| 64.65                   | 100.0   | 65.8                               | less-open  |
| 64.78                   | 213.5   | 59.6                               | less-open  |
| 64.94                   | 303.2   | 46.6                               | less-open  |
| 65.35                   | 108.3   | 70.5                               | less-open  |
| 65.89                   | 111.7   | 67.7                               | less-open  |
| 66.36                   | 112.5   | 63.7                               | less-open  |
| 66.56                   | 122.2   | 64.8                               | less-open  |
| 66.92                   | 110.3   | 62.7                               | less-open  |
| 67.54                   | 109.0   | 49.7                               | less-open  |
| 67.86                   | 104.0   | 67.8                               | less-open  |
| 68.16                   | 283.7   | 42.9                               | less-open  |
| 68.29                   | 99.0  | 74.7                               | less-open  |
| 68.38                   | 93.3  | 58.3                               | less-open  |
| 68.82                   | 97.4  | 64.8                               | less-open  |
| 69.19                   | 215.7   | 67.2                               | less-open  |
| 69.83                   | 220.4   | 71.7                               | less-open  |
| 70.09                   | 116.0   | 61.7                               | less-open  |
| 71.06                   | 114.9   | 60.0                               | less-open  |
| 71.45                   | 130.4   | 61.9                               | less-open  |
| 72.05                   | 107.2   | 67.4                               | less-open  |
| 72.09                   | 209.1   | 58.5                               | less-open  |
| 72.22                   | 100.4   | 70.3                               | less-open  |
| 72.64                   | 295.4   | 36.4                               | less-open  |
| 72.72                   | 90.5  | 67.1                               | less-open  |
| 73.46                   | 119.2   | 65.5                               | less-open  |
| 73.85                   | 346.1   | 45.7                               | less-open  |
| 74.13                   | 108.9   | 65.4                               | less-open  |
| 74.29                   | 344.76  | 45.71                              | less-open  |
| 74.55                   | 306.53  | 60.33                              | less-open  |
| 74.93                   | 351.2   | 49.7                               | less-open  |
| 75.12                   | 107.5   | 62.8                               | less-open  |
| 75.38                   | 117.5   | 67.4                               | less-open  |
| 75.64                   | 107.7   | 67.5                               | less-open  |
| 75.89                   | 352.2   | 48.6                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 76.02                   | 355.5   | 52.1                               | less-open  |
| 76.46                   | 112.2   | 70.7                               | less-open  |
| 76.82                   | 357.3   | 36.6                               | less-open  |
| 77.33                   | 300.6   | 26.5                               | less-open  |
| 78.19                   | 2.9   | 55.3                               | less-open  |
| 78.56                   | 127.1   | 63.0                               | less-open  |
| 79.56                   | 110.2   | 64.1                               | less-open  |
| 81.07                   | 262.3   | 69.5                               | less-open  |
| 81.48                   | 318.5   | 54.3                               | less-open  |
| 81.60                   | 347.7   | 54.7                               | less-open  |
| 81.67                   | 306.4   | 38.3                               | less-open  |
| 82.28                   | 332.0   | 28.2                               | less-open  |
| 82.53                   | 1.1   | 23.5                               | open   |
| 82.88                   | 337.7   | 35.1                               | less-open  |
| 82.95                   | 355.3   | 45.5                               | less-open  |
| 82.99                   | 94.5  | 69.6                               | less-open  |
| 83.02                   | 304.8   | 45.7                               | less-open  |
| 83.26                   | 122.0   | 72.0                               | less-open  |
| 84.02                   | 305.3   | 38.2                               | less-open  |
| 84.4                    | 279.7   | 61.5                               | less-open  |
| 84.81                   | 108.4   | 66.6                               | less-open  |
| 85.95                   | 34.3  | 32.8                               | less-open  |
| 86.49                   | 349.5   | 48.7                               | less-open  |
| 86.68                   | 104.4   | 69.1                               | less-open  |
| 87.44                   | 112.1   | 67.8                               | less-open  |
| 87.83                   | 67.7  | 68.3                               | less-open  |
| 88.01                   | 102.5   | 67.7                               | less-open  |
| 88.66                   | 112.3   | 68.7                               | less-open  |
| 88.8                    | 286.2   | 48.2                               | less-open  |
| 89.82                   | 325.0   | 47.7                               | less-open  |
| 89.98                   | 289.4   | 54.1                               | less-open  |
| 90.35                   | 338.8   | 30.9                               | less-open  |
| 90.72                   | 331.3   | 56.5                               | less-open  |
| 90.84                   | 1.6   | 52.8                               | less-open  |
| 91.04                   | 108.4   | 65.0                               | less-open  |
| 91.09                   | 296.1   | 50.4                               | less-open  |
| 91.75                   | 354.8   | 56.1                               | less-open  |
| 92.53                   | 325.1   | 52.1                               | less-open  |
| 92.68                   | 320.4   | 48.3                               | less-open  |
| 93                      | 356.7   | 53.62                              | less-open  |
| 93.47                   | 330.48  | 64.81                              | less-open  |
| 93.59                   | 357.1   | 54.3                               | less-open  |
| 93.7                    | 303.6   | 53.9                               | less-open  |
| 94.19                   | 327.0   | 43.8                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 94.46                   | 322.0   | 43.5                               | less-open  |
| 94.65                   | 319.2   | 46.9                               | less-open  |
| 95.09                   | 321.0   | 48.9                               | less-open  |
| 95.91                   | 328.5   | 47.8                               | less-open  |
| 97.76                   | 278.0   | 47.8                               | less-open  |
| 99.14                   | 105.1   | 61.9                               | less-open  |
| 99.17                   | 308.41  | 44.25                              | less-open  |
| 99.61                   | 304.96  | 62.27                              | less-open  |
| 100.51                  | 311.6   | 41.5                               | less-open  |
| 100.78                  | 356.9   | 55.7                               | less-open  |
| 100.97                  | 344.5   | 25.3                               | less-open  |
| 103.47                  | 115.5   | 63.8                               | less-open  |
| 103.57                  | 114.8   | 61.6                               | less-open  |
| 103.72                  | 316.3   | 39.8                               | less-open  |
| 104.45                  | 87.5  | 63.1                               | less-open  |
| 105.87                  | 303.7   | 60.8                               | less-open  |
| 106.43                  | 113.8   | 59.2                               | less-open  |
| 106.86                  | 282.5   | 56.1                               | less-open  |
| 107.54                  | 29.6  | 53.5                               | less-open  |
| 108.05                  | 29.6  | 56.8                               | less-open  |
| 108.86                  | 252.0   | 50.2                               | less-open  |
| 109.21                  | 302.7   | 45.9                               | less-open  |
| 110.54                  | 307.5   | 36.3                               | less-open  |
| 110.77                  | 310.9   | 41.7                               | less-open  |
| 111.1                   | 110.5   | 62.8                               | less-open  |
| 111.23                  | 293.4   | 36.0                               | less-open  |
| 111.82                  | 107.8   | 66.2                               | less-open  |
| 113.15                  | 314.8   | 38.1                               | less-open  |
| 113.3                   | 305.8   | 39.9                               | less-open  |
| 114.7                   | 312.2   | 37.3                               | less-open  |
| 115.95                  | 1.0   | 43.1                               | less-open  |
| 116.56                  | 359.6   | 52.3                               | less-open  |
| 116.74                  | 111.4   | 66.2                               | less-open  |
| 117.49                  | 336.6   | 50.4                               | less-open  |
| 117.73                  | 316.9   | 47.8                               | less-open  |
| 117.99                  | 50.0  | 44.5                               | less-open  |
| 118.14                  | 111.4   | 66.2                               | less-open  |
| 118.98                  | 96.6  | 64.1                               | less-open  |
| 119.33                  | 302.6   | 43.2                               | less-open  |
| 119.88                  | 115.9   | 60.9                               | less-open  |
| 120.41                  | 295.8   | 49.9                               | less-open  |
| 120.65                  | 108.5   | 63.8                               | less-open  |
| 120.66                  | 329.1   | 32.6                               | less-open  |
| 120.98                  | 101.6   | 66.2                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 120.99                  | 2.9   | 37.6                               | less-open  |
| 121.36                  | 315.0   | 46.6                               | less-open  |
| 121.64                  | 309.9   | 43.0                               | less-open  |
| 122.18                  | 296.2   | 38.7                               | less-open  |
| 122.6                   | 340.8   | 48.8                               | less-open  |
| 122.89                  | 294.8   | 67.7                               | less-open  |
| 123.41                  | 324.7   | 57.0                               | less-open  |
| 123.8                   | 311.7   | 75.7                               | less-open  |
| 123.86                  | 127.1   | 58.9                               | less-open  |
| 124.75                  | 295.9   | 60.3                               | less-open  |
| 124.92                  | 52.2  | 60.8                               | less-open  |
| 128.82                  | 61.4  | 67.8                               | less-open  |
| 129.8                   | 351.1   | 69.6                               | less-open  |
| 130.28                  | 281.2   | 33.4                               | less-open  |
| 130.56                  | 121.5   | 59.9                               | less-open  |
| 130.85                  | 115.6   | 56.4                               | less-open  |
| 131                     | 281.5   | 37.7                               | less-open  |
| 132.23                  | 101.4   | 67.3                               | less-open  |
| 132.57                  | 109.0   | 64.0                               | less-open  |
| 132.85                  | 119.5   | 62.0                               | less-open  |
| 133.13                  | 92.3  | 67.5                               | less-open  |
| 134.06                  | 119.4   | 63.1                               | less-open  |
| 134.32                  | 118.5   | 62.1                               | less-open  |
| 134.65                  | 106.2   | 58.5                               | less-open  |
| 135.19                  | 114.44  | 64.63                              | less-open  |
| 135.39                  | 125.78  | 61.15                              | less-open  |
| 135.64                  | 114.8   | 62.9                               | less-open  |
| 135.84                  | 108.8   | 66.4                               | less-open  |
| 136.54                  | 105.2   | 63.6                               | less-open  |
| 137.03                  | 299.8   | 62.2                               | less-open  |
| 138.54                  | 315.7   | 69.8                               | less-open  |
| 139.01                  | 100.4   | 69.4                               | less-open  |
| 139.21                  | 92.9  | 71.0                               | less-open  |
| 139.63                  | 116.7   | 63.0                               | less-open  |
| 140.52                  | 325.6   | 50.5                               | less-open  |
| 140.76                  | 104.7   | 71.8                               | less-open  |
| 143.61                  | 332.3   | 10.6                               | less-open  |
| 144.4                   | 328.6   | 55.8                               | less-open  |
| 144.91                  | 110.5   | 63.9                               | less-open  |
| 145.54                  | 340.0   | 33.4                               | less-open  |
| 148.71                  | 105.1   | 70.2                               | less-open  |
| 149.95                  | 332.8   | 64.3                               | less-open  |
| 150.24                  | 101.7   | 68.8                               | less-open  |
| 150.7                   | 190.2   | 27.0                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 150.74                  | 207.1   | 69.6                               | less-open  |
| 151.03                  | 83.0  | 70.5                               | less-open  |
| 151.24                  | 83.0  | 66.2                               | less-open  |
| 152.27                  | 339.3   | 57.7                               | less-open  |
| 152.42                  | 336.7   | 58.9                               | less-open  |
| 153.24                  | 240.4   | 24.2                               | less-open  |
| 153.31                  | 254.0   | 34.0                               | less-open  |
| 153.75                  | 340.8   | 50.7                               | less-open  |
| 153.89                  | 339.0   | 55.8                               | less-open  |
| 155.3                   | 343.2   | 54.0                               | less-open  |
| 156.87                  | 328.7   | 47.9                               | less-open  |
| 158.23                  | 333.8   | 33.5                               | less-open  |
| 158.38                  | 332.6   | 46.9                               | less-open  |
| 159.03                  | 322.2   | 54.7                               | less-open  |
| 159.32                  | 321.8   | 39.5                               | open   |
| 159.7                   | 332.4   | 48.9                               | less-open  |
| 159.78                  | 325.5   | 47.2                               | less-open  |
| 160.5                   | 332.1   | 47.0                               | less-open  |
| 160.51                  | 115.5   | 60.8                               | less-open  |
| 160.8                   | 105.3   | 63.8                               | less-open  |
| 161.15                  | 320.5   | 45.4                               | less-open  |
| 161.56                  | 315.0   | 48.7                               | less-open  |
| 161.69                  | 325.6   | 45.3                               | less-open  |
| 161.93                  | 320.6   | 49.5                               | less-open  |
| 162.2                   | 324.0   | 45.8                               | less-open  |
| 162.37                  | 322.0   | 44.7                               | less-open  |
| 163.38                  | 84.0  | 46.1                               | less-open  |
| 163.87                  | 25.8  | 21.2                               | less-open  |
| 164.07                  | 101.5   | 70.2                               | less-open  |
| 164.41                  | 98.79   | 72.05                              | less-open  |
| 165.42                  | 359.5   | 47.5                               | less-open  |
| 165.44                  | 285.4   | 34.9                               | less-open  |
| 166.03                  | 342.8   | 47.4                               | less-open  |
| 168.12                  | 6.2   | 49.2                               | less-open  |
| 168.67                  | 31.4  | 16.3                               | less-open  |
| 169.28                  | 28.3  | 58.3                               | less-open  |
| 169.37                  | 332.8   | 50.6                               | less-open  |
| 169.67                  | 43.7  | 42.9                               | less-open  |
| 170.28                  | 44.1  | 67.9                               | less-open  |
| 170.37                  | 57.11   | 35.34                              | less-open  |
| 170.77                  | 34.39   | 27.47                              | less-open  |
| 171.24                  | 65.69   | 35.01                              | less-open  |
| 171.73                  | 341.53  | 57.13                              | less-open  |
| 172.57                  | 335.41  | 56.48                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 173.46                  | 10.43   | 53.91                              | less-open  |
| 173.99                  | 323.84  | 58.9                               | less-open  |
| 174.16                  | 338.07  | 51.91                              | less-open  |
| 174.49                  | 335.32  | 49.31                              | less-open  |
| 174.83                  | 311.21  | 59.01                              | less-open  |
| 175.71                  | 332.86  | 65.51                              | less-open  |
| 175.84                  | 92.52   | 71.41                              | less-open  |
| 179.07                  | 95.76   | 67.85                              | less-open  |
| 179.24                  | 97.17   | 70.62                              | less-open  |
| 179.92                  | 329.87  | 71.17                              | less-open  |
| 181.48                  | 249.48  | 62.23                              | less-open  |
| 182.32                  | 12.37   | 42.33                              | less-open  |
| 184.03                  | 151.01  | 68.38                              | less-open  |
| 184.23                  | 322.28  | 71.21                              | less-open  |
| 184.42                  | 307.68  | 45.33                              | less-open  |
| 185.34                  | 249.46  | 58.86                              | less-open  |
| 185.79                  | 349.03  | 30.78                              | less-open  |
| 186.81                  | 76.35   | 45.93                              | less-open  |
| 188.54                  | 303.13  | 39.12                              | less-open  |
| 188.89                  | 317.52  | 47.22                              | less-open  |
| 189.81                  | 298   | 73.28                              | less-open  |
| 190.68                  | 31.9  | 14.42                              | less-open  |
| 190.91                  | 346.94  | 22.29                              | less-open  |
| 193.29                  | 296.54  | 77.33                              | less-open  |
| 193.65                  | 294.57  | 42.41                              | less-open  |
| 195.42                  | 301.71  | 16.23                              | less-open  |
| 195.91                  | 332.07  | 16.06                              | less-open  |
| 196.37                  | 333.48  | 49.34                              | less-open  |
| 196.49                  | 98.98   | 72.33                              | less-open  |
| 196.68                  | 130.8   | 76.02                              | less-open  |
| 196.71                  | 128.03  | 52.57                              | less-open  |
| 197.12                  | 57.65   | 41.03                              | less-open  |
| 197.2                   | 45.38   | 37.82                              | less-open  |
| 197.32                  | 127.06  | 65.5                               | less-open  |
| 197.34                  | 129.94  | 68.23                              | less-open  |
| 197.67                  | 113.41  | 69.54                              | less-open  |
| 198.24                  | 13.18   | 32.18                              | less-open  |
| 198.71                  | 19.77   | 87.87                              | less-open  |
| 199.02                  | 11.6  | 87.35                              | less-open  |



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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 36.98                   | 87.0  | 56.2                               | less-open  |
| 37.28                   | 84.2  | 48.8                               | less-open  |
| 37.41                   | 282.4   | 39.6                               | less-open  |
| 37.44                   | 87.1  | 49.4                               | less-open  |
| 37.46                   | 64.5  | 57.1                               | less-open  |
| 37.49                   | 257.0   | 42.6                               | less-open  |
| 38.08                   | 79.2  | 57.1                               | less-open  |
| 38.33                   | 266.2   | 26.9                               | less-open  |
| 39.01                   | 143.8   | 76.0                               | less-open  |
| 39.69                   | 147.1   | 75.5                               | less-open  |
| 40.12                   | 283.5   | 24.5                               | less-open  |
| 40.53                   | 193.5   | 42.5                               | less-open  |
| 40.90                   | 275.8   | 26.0                               | less-open  |
| 41.22                   | 275.0   | 20.6                               | less-open  |
| 41.31                   | 248.9   | 67.4                               | less-open  |
| 41.47                   | 236.3   | 49.5                               | less-open  |
| 41.76                   | 213.0   | 55.1                               | less-open  |
| 42.53                   | 287.8   | 14.3                               | less-open  |
| 42.80                   | 280.5   | 14.9                               | less-open  |
| 42.89                   | 308.5   | 16.3                               | less-open  |
| 43.10                   | 83.9  | 53.7                               | less-open  |
| 43.17                   | 241.5   | 64.5                               | less-open  |
| 43.31                   | 100.1   | 41.9                               | less-open  |
| 43.78                   | 90.3  | 43.7                               | less-open  |
| 44.27                   | 89.3  | 60.1                               | less-open  |
| 44.45                   | 269.4   | 63.8                               | less-open  |
| 44.57                   | 109.5   | 79.6                               | less-open  |
| 45.14                   | 316.0   | 58.4                               | less-open  |
| 45.20                   | 7.2   | 22.6                               | less-open  |
| 45.59                   | 83.1  | 57.7                               | less-open  |
| 45.69                   | 277.9   | 41.6                               | less-open  |
| 45.75                   | 280.4   | 38.5                               | less-open  |
| 45.78                   | 96.6  | 39.4                               | less-open  |
| 45.78                   | 97.5  | 57.6                               | less-open  |
| 45.98                   | 103.2   | 50.0                               | less-open  |
| 46.30                   | 89.5  | 55.2                               | less-open  |
| 46.55                   | 305.9   | 33.1                               | less-open  |
| 46.59                   | 81.6  | 50.0                               | less-open  |
| 46.68                   | 98.0  | 57.4                               | less-open  |
| 46.87                   | 89.9  | 69.2                               | less-open  |
| 47.12                   | 278.9   | 39.0                               | less-open  |
| 47.48                   | 267.9   | 43.1                               | less-open  |
| 48.32                   | 259.9   | 46.4                               | less-open  |
| 48.34                   | 108.6   | 63.5                               | less-open  |

Note that down-dip compass azimuth is perpendicular to the strike direction.

Note that interpreted down-dip compass azimuths are with respect to magnetic north.

Down-dip azimuths & dip angles were corrected for borehole deviation from vertical.

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 48.43                   | 191.9   | 48.2                               | less-open  |
| 48.72                   | 269.04  | 42.11                              | less-open  |
| 48.95                   | 290   | 42.87                              | less-open  |
| 49.01                   | 94.3  | 61.2                               | less-open  |
| 49.41                   | 311.47  | 31.1                               | less-open  |
| 49.95                   | 289.66  | 35.66                              | less-open  |
| 50.33                   | 279.3   | 44.4                               | less-open  |
| 50.51                   | 90.4  | 57.5                               | less-open  |
| 50.55                   | 306.5   | 38.2                               | less-open  |
| 50.74                   | 320.4   | 34.2                               | less-open  |
| 50.97                   | 87.5  | 54.3                               | less-open  |
| 51.04                   | 96.8  | 52.0                               | less-open  |
| 51.17                   | 253.2   | 62.6                               | less-open  |
| 51.25                   | 85.6  | 35.1                               | less-open  |
| 51.56                   | 149.4   | 78.6                               | less-open  |
| 51.93                   | 316.1   | 42.7                               | open   |
| 52.11                   | 307.0   | 32.6                               | less-open  |
| 52.27                   | 325.6   | 39.8                               | less-open  |
| 52.43                   | 319.0   | 47.3                               | open   |
| 52.62                   | 301.9   | 36.7                               | less-open  |
| 52.69                   | 102.4   | 42.1                               | less-open  |
| 52.81                   | 102.6   | 44.9                               | less-open  |
| 52.92                   | 265.4   | 51.3                               | less-open  |
| 53.56                   | 102.4   | 66.7                               | less-open  |
| 53.59                   | 300.7   | 41.9                               | less-open  |
| 53.70                   | 53.8  | 51.9                               | less-open  |
| 53.77                   | 112.5   | 41.7                               | less-open  |
| 54.09                   | 312.1   | 42.1                               | less-open  |
| 54.16                   | 102.7   | 38.5                               | less-open  |
| 54.50                   | 251.0   | 55.1                               | less-open  |
| 54.70                   | 310.0   | 46.7                               | less-open  |
| 54.79                   | 299.1   | 44.7                               | less-open  |
| 54.91                   | 295.6   | 49.2                               | open   |
| 55.11                   | 80.7  | 42.5                               | less-open  |
| 55.51                   | 105.3   | 39.9                               | less-open  |
| 55.67                   | 299.14  | 41.72                              | less-open  |
| 55.73                   | 107.05  | 44.95                              | less-open  |
| 56.01                   | 290.6   | 46.6                               | less-open  |
| 56.38                   | 301.6   | 47.2                               | less-open  |
| 56.39                   | 89.1  | 40.8                               | less-open  |
| 56.64                   | 308.3   | 62.0                               | less-open  |
| 57.19                   | 97.2  | 47.6                               | less-open  |
| 57.25                   | 307.9   | 53.1                               | less-open  |
| 57.36                   | 307.6   | 56.4                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 57.49                   | 316.1   | 52.0                               | less-open  |
| 57.61                   | 314.9   | 52.9                               | less-open  |
| 57.80                   | 315.0   | 47.8                               | less-open  |
| 57.96                   | 307.0   | 48.2                               | less-open  |
| 58.41                   | 144.9   | 64.2                               | less-open  |
| 58.49                   | 272.6   | 33.4                               | less-open  |
| 58.58                   | 101.0   | 52.4                               | less-open  |
| 58.76                   | 91.8  | 46.7                               | less-open  |
| 58.95                   | 301.0   | 47.2                               | less-open  |
| 59.22                   | 79.0  | 32.5                               | less-open  |
| 59.48                   | 97.2  | 42.9                               | less-open  |
| 59.92                   | 94.4  | 36.3                               | less-open  |
| 60.26                   | 295.0   | 40.2                               | less-open  |
| 60.37                   | 78.0  | 54.2                               | less-open  |
| 60.43                   | 305.6   | 36.9                               | less-open  |
| 60.49                   | 102.7   | 52.6                               | less-open  |
| 60.72                   | 325.0   | 68.6                               | less-open  |
| 60.95                   | 114.8   | 46.4                               | less-open  |
| 61.39                   | 109.4   | 53.0                               | less-open  |
| 61.54                   | 319.3   | 75.4                               | less-open  |
| 62.55                   | 127.4   | 46.2                               | less-open  |
| 62.98                   | 123.1   | 72.5                               | less-open  |
| 63.26                   | 295.3   | 44.6                               | less-open  |
| 63.59                   | 258.3   | 31.2                               | less-open  |
| 63.82                   | 103.5   | 59.2                               | less-open  |
| 64.23                   | 264.9   | 36.5                               | less-open  |
| 64.33                   | 98.2  | 65.0                               | less-open  |
| 64.42                   | 92.8  | 64.4                               | less-open  |
| 64.84                   | 91.8  | 55.1                               | less-open  |
| 64.89                   | 127.6   | 23.1                               | less-open  |
| 65                      | 98.3  | 55.7                               | less-open  |
| 65.14                   | 91.9  | 44.7                               | less-open  |
| 65.6                    | 95.8  | 41.8                               | less-open  |
| 65.92                   | 86.3  | 52.4                               | less-open  |
| 66.05                   | 89.0  | 57.4                               | less-open  |
| 66.19                   | 95.9  | 44.7                               | less-open  |
| 66.2                    | 250.9   | 62.7                               | less-open  |
| 66.22                   | 297.83  | 80.36                              | less-open  |
| 66.3                    | 99.31   | 42.17                              | less-open  |
| 66.5                    | 323.7   | 23.9                               | less-open  |
| 66.66                   | 324.1   | 40.3                               | less-open  |
| 66.83                   | 308.7   | 29.0                               | less-open  |
| 66.99                   | 83.0  | 43.5                               | less-open  |
| 67.12                   | 91.3  | 58.4                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 67.21                   | 86.6  | 42.6                               | less-open  |
| 67.28                   | 290.1   | 48.9                               | less-open  |
| 67.52                   | 329.3   | 51.2                               | less-open  |
| 67.74                   | 79.7  | 43.2                               | less-open  |
| 67.88                   | 90.74   | 30.17                              | less-open  |
| 68.18                   | 260.41  | 33.48                              | less-open  |
| 68.53                   | 292.4   | 70.1                               | less-open  |
| 68.55                   | 306.6   | 47.8                               | less-open  |
| 68.67                   | 82.1  | 29.7                               | less-open  |
| 68.97                   | 294.4   | 67.6                               | less-open  |
| 69.27                   | 335.9   | 31.2                               | less-open  |
| 69.42                   | 111.0   | 24.3                               | less-open  |
| 69.72                   | 101.5   | 45.9                               | less-open  |
| 69.95                   | 281.3   | 28.0                               | less-open  |
| 70.03                   | 97.0  | 30.2                               | less-open  |
| 70.4                    | 90.4  | 59.0                               | less-open  |
| 70.95                   | 102.0   | 50.4                               | less-open  |
| 70.97                   | 290.9   | 32.5                               | less-open  |
| 71.99                   | 99.7  | 49.8                               | less-open  |
| 72.15                   | 341.3   | 81.2                               | less-open  |
| 72.32                   | 88.9  | 54.5                               | less-open  |
| 72.65                   | 101.9   | 51.8                               | less-open  |
| 72.67                   | 269.8   | 31.1                               | less-open  |
| 72.92                   | 94.6  | 39.3                               | less-open  |
| 73.31                   | 104.7   | 53.3                               | less-open  |
| 73.32                   | 323.8   | 44.1                               | less-open  |
| 73.53                   | 66.1  | 51.0                               | less-open  |
| 73.79                   | 92.5  | 41.0                               | less-open  |
| 74.28                   | 107.1   | 51.3                               | less-open  |
| 74.37                   | 100.8   | 47.3                               | less-open  |
| 74.6                    | 314.1   | 68.0                               | less-open  |
| 75.33                   | 97.0  | 41.8                               | less-open  |
| 75.36                   | 211.1   | 63.0                               | less-open  |
| 75.46                   | 110.9   | 39.9                               | less-open  |
| 75.57                   | 122.7   | 38.2                               | less-open  |
| 75.79                   | 100.7   | 51.2                               | less-open  |
| 76.21                   | 101.3   | 44.8                               | less-open  |
| 76.33                   | 105.6   | 45.6                               | less-open  |
| 76.96                   | 95.9  | 47.4                               | less-open  |
| 77.13                   | 90.5  | 60.4                               | less-open  |
| 77.65                   | 100.3   | 45.5                               | less-open  |
| 77.88                   | 79.2  | 51.1                               | less-open  |
| 78.05                   | 319.7   | 63.4                               | less-open  |
| 78.07                   | 104.6   | 50.7                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 78.58                   | 245.5   | 32.7                               | less-open  |
| 78.69                   | 256.2   | 32.1                               | less-open  |
| 78.79                   | 244.7   | 33.6                               | less-open  |
| 78.95                   | 249.8   | 37.1                               | less-open  |
| 79.4                    | 231.6   | 49.1                               | less-open  |
| 79.44                   | 309.4   | 49.0                               | less-open  |
| 79.54                   | 101.2   | 55.0                               | less-open  |
| 79.89                   | 218.7   | 63.0                               | less-open  |
| 80.26                   | 128.0   | 50.4                               | less-open  |
| 80.52                   | 99.1  | 52.9                               | less-open  |
| 80.58                   | 335.5   | 72.1                               | less-open  |
| 80.75                   | 194.3   | 36.4                               | less-open  |
| 81.68                   | 333.1   | 78.0                               | less-open  |
| 83.34                   | 160.9   | 36.1                               | less-open  |
| 84.36                   | 148.0   | 44.6                               | less-open  |
| 84.37                   | 307.4   | 70.5                               | less-open  |
| 84.46                   | 331.5   | 63.6                               | less-open  |
| 84.95                   | 94.5  | 44.7                               | less-open  |
| 85.13                   | 158.3   | 15.7                               | less-open  |
| 85.31                   | 201.6   | 36.5                               | less-open  |
| 85.45                   | 315.6   | 19.8                               | less-open  |
| 85.69                   | 213.3   | 9.6                                | less-open  |
| 86.14                   | 150.27  | 78.24                              | less-open  |
| 86.31                   | 261.63  | 34.99                              | less-open  |
| 86.98                   | 89.5  | 62.9                               | less-open  |
| 87.16                   | 265.1   | 47.0                               | open   |
| 87.19                   | 95.7  | 56.7                               | less-open  |
| 87.64                   | 159.2   | 80.2                               | open   |
| 87.85                   | 312.1   | 35.8                               | less-open  |
| 88.37                   | 164.5   | 74.7                               | open   |
| 89.71                   | 139.9   | 73.7                               | open   |
| 89.86                   | 166.0   | 73.1                               | open   |
| 90.21                   | 162.5   | 34.9                               | less-open  |
| 90.56                   | 169.1   | 58.2                               | less-open  |
| 90.67                   | 155.4   | 45.2                               | less-open  |
| 91.76                   | 339.7   | 80.2                               | less-open  |
| 91.76                   | 135.4   | 65.9                               | open   |
| 92.43                   | 147.6   | 66.0                               | open   |
| 92.49                   | 344.8   | 60.5                               | open   |
| 92.88                   | 130.2   | 61.4                               | open   |
| 93.11                   | 178.9   | 62.4                               | open   |
| 93.72                   | 167.6   | 70.2                               | less-open  |
| 94.16                   | 164.5   | 69.1                               | less-open  |
| 94.84                   | 139.7   | 51.5                               | open   |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 95                      | 289.52  | 81.78                              | open   |
| 95.17                   | 153.6   | 70.0                               | less-open  |
| 95.45                   | 151.6   | 67.8                               | less-open  |
| 96.8                    | 124.73  | 82.15                              | open   |
| 97.09                   | 1.7   | 43.5                               | open   |
| 97.49                   | 315.0   | 43.7                               | open   |
| 97.71                   | 300.8   | 50.0                               | less-open  |
| 98.09                   | 306.7   | 40.0                               | less-open  |
| 98.31                   | 291.1   | 33.8                               | less-open  |
| 98.51                   | 331.4   | 79.6                               | less-open  |
| 98.53                   | 286.5   | 33.8                               | less-open  |
| 98.7                    | 246.0   | 48.0                               | less-open  |
| 99.03                   | 241.6   | 28.7                               | less-open  |
| 99.19                   | 161.9   | 75.8                               | less-open  |
| 99.4                    | 248.4   | 49.3                               | less-open  |
| 99.65                   | 305.6   | 31.7                               | less-open  |
| 99.83                   | 269.7   | 25.6                               | less-open  |
| 100.14                  | 255.2   | 36.7                               | less-open  |
| 100.31                  | 97.0  | 41.7                               | less-open  |
| 100.84                  | 260.5   | 28.9                               | less-open  |
| 100.93                  | 155.3   | 64.5                               | less-open  |
| 101.62                  | 323.7   | 77.3                               | less-open  |
| 101.8                   | 316.2   | 44.8                               | less-open  |
| 102.05                  | 312.0   | 46.9                               | less-open  |
| 102.34                  | 274.9   | 28.5                               | less-open  |
| 102.95                  | 195.1   | 51.1                               | less-open  |
| 103.65                  | 154.2   | 60.3                               | less-open  |
| 103.7                   | 261.8   | 34.8                               | less-open  |
| 104.08                  | 109.93  | 49.01                              | less-open  |
| 104.64                  | 253.58  | 31.29                              | less-open  |
| 104.73                  | 243.4   | 36.9                               | less-open  |
| 105.1                   | 68.3  | 69.1                               | less-open  |
| 105.45                  | 98.3  | 54.4                               | less-open  |
| 106.07                  | 311.6   | 46.5                               | less-open  |
| 107.43                  | 306.0   | 43.6                               | less-open  |
| 108.01                  | 278.8   | 36.6                               | less-open  |
| 110.53                  | 319.0   | 51.6                               | less-open  |
| 110.61                  | 320.0   | 44.9                               | less-open  |
| 110.67                  | 320.0   | 52.4                               | less-open  |
| 112.57                  | 263.36  | 33.15                              | less-open  |
| 113.73                  | 344.04  | 58.34                              | less-open  |
| 113.74                  | 252.12  | 31.8                               | less-open  |
| 114.13                  | 350.58  | 31.52                              | less-open  |
| 114.32                  | 137.01  | 64.52                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 114.53                  | 274.06  | 27.43                              | less-open  |
| 115.43                  | 253.24  | 30.36                              | less-open  |
| 115.87                  | 95.72   | 62.81                              | less-open  |
| 116.6                   | 139.87  | 65.13                              | less-open  |
| 117.6                   | 146.1   | 61.22                              | less-open  |
| 117.85                  | 160.56  | 61.64                              | less-open  |
| 117.87                  | 258.22  | 31.98                              | less-open  |
| 118.6                   | 216.1   | 43.4                               | less-open  |
| 119.11                  | 288.79  | 31.64                              | less-open  |
| 119.37                  | 121.55  | 59.66                              | less-open  |
| 119.84                  | 314.73  | 33.02                              | less-open  |
| 120.11                  | 97.44   | 72.18                              | less-open  |
| 120.27                  | 311.77  | 36.3                               | less-open  |
| 120.71                  | 316.07  | 36.53                              | less-open  |
| 120.99                  | 314.29  | 28.93                              | less-open  |
| 121.06                  | 114.79  | 58.17                              | less-open  |
| 121.37                  | 325.61  | 37.73                              | less-open  |
| 121.59                  | 137.4   | 65.71                              | less-open  |
| 121.83                  | 292.8   | 55.32                              | less-open  |
| 122.97                  | 316.23  | 64.58                              | less-open  |
| 124.04                  | 326.69  | 37.69                              | open   |
| 124.44                  | 104.86  | 65.55                              | less-open  |
| 124.75                  | 298.26  | 48.02                              | less-open  |
| 124.99                  | 103.52  | 62.67                              | less-open  |
| 125.24                  | 120.19  | 60.36                              | less-open  |
| 125.45                  | 121.65  | 60.88                              | less-open  |
| 125.58                  | 103.59  | 61.89                              | less-open  |
| 125.71                  | 114.58  | 65.9                               | less-open  |
| 126                     | 127.51  | 53.02                              | less-open  |
| 126.38                  | 113.83  | 60.37                              | less-open  |
| 126.62                  | 122.56  | 56.86                              | less-open  |
| 126.73                  | 117.71  | 55.11                              | less-open  |
| 126.89                  | 122.66  | 65.44                              | less-open  |
| 127.06                  | 94.3  | 49.84                              | less-open  |
| 127.44                  | 121.63  | 54.99                              | less-open  |
| 127.49                  | 339.35  | 81.93                              | less-open  |
| 127.69                  | 139.26  | 61.23                              | less-open  |
| 127.88                  | 134.59  | 53.84                              | less-open  |
| 128.15                  | 137.43  | 56.86                              | less-open  |
| 128.55                  | 135.86  | 60.24                              | less-open  |
| 129.15                  | 107.96  | 55.03                              | less-open  |
| 129.73                  | 112.9   | 54.93                              | less-open  |
| 130.1                   | 116.18  | 47.05                              | less-open  |
| 130.27                  | 282.59  | 65.52                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 130.51                  | 116.82  | 56.56                              | less-open  |
| 131.23                  | 300.7   | 59.97                              | less-open  |
| 131.66                  | 119.68  | 58.83                              | less-open  |
| 133.15                  | 106.33  | 58.99                              | less-open  |
| 133.36                  | 102.79  | 74.86                              | less-open  |
| 133.38                  | 103.52  | 59.27                              | less-open  |
| 133.91                  | 105.11  | 61.26                              | less-open  |
| 134.06                  | 109.88  | 60.85                              | less-open  |
| 134.3                   | 112.33  | 57.91                              | less-open  |
| 134.37                  | 346.22  | 82.76                              | less-open  |
| 134.45                  | 110.86  | 58.15                              | less-open  |
| 134.82                  | 103.53  | 54.67                              | less-open  |
| 136.59                  | 293.56  | 35.63                              | less-open  |
| 136.77                  | 107.88  | 59.84                              | less-open  |
| 137.48                  | 117.24  | 59.87                              | less-open  |
| 137.51                  | 214.7   | 35.92                              | less-open  |
| 137.98                  | 114.83  | 59.32                              | less-open  |
| 138.02                  | 338.68  | 41.3                               | less-open  |
| 138.11                  | 329.41  | 49.84                              | less-open  |
| 138.2                   | 116.27  | 54.34                              | less-open  |
| 138.37                  | 117.06  | 57.88                              | less-open  |
| 139.52                  | 127.22  | 48.78                              | less-open  |
| 139.96                  | 105.12  | 61.48                              | less-open  |
| 140.22                  | 255.56  | 39.02                              | less-open  |
| 140.73                  | 277.76  | 12.19                              | less-open  |
| 140.76                  | 274.08  | 15.38                              | less-open  |
| 142.05                  | 282.23  | 20.24                              | less-open  |
| 142.92                  | 350.42  | 30.4                               | less-open  |
| 143.3                   | 316.45  | 30.54                              | less-open  |
| 143.73                  | 81.93   | 39.87                              | less-open  |
| 144.08                  | 119.88  | 60.02                              | less-open  |
| 144.36                  | 106.92  | 50.78                              | less-open  |
| 144.94                  | 260.66  | 37.76                              | less-open  |
| 146.06                  | 255.39  | 42.3                               | less-open  |
| 146.07                  | 124.13  | 65.09                              | less-open  |
| 146.92                  | 115.71  | 60.8                               | less-open  |
| 147.26                  | 319.9   | 51.04                              | less-open  |
| 147.83                  | 124.7   | 54.58                              | less-open  |
| 148.14                  | 112.31  | 60.59                              | less-open  |
| 148.47                  | 330.59  | 65.8                               | less-open  |
| 148.77                  | 116.25  | 58.39                              | less-open  |
| 149.09                  | 114.78  | 60.42                              | less-open  |
| 149.22                  | 106.13  | 65.22                              | less-open  |
| 149.64                  | 116.23  | 59.94                              | less-open  |



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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 150.34                  | 106.99  | 59.72                              | less-open  |
| 151.25                  | 109.84  | 59.43                              | less-open  |
| 151.37                  | 112.33  | 57.71                              | less-open  |
| 151.64                  | 122.62  | 58.33                              | less-open  |
| 151.91                  | 111.62  | 39.26                              | less-open  |
| 152.17                  | 98.68   | 60.91                              | less-open  |
| 153.02                  | 334.34  | 52.01                              | less-open  |
| 153.16                  | 117.27  | 61.38                              | less-open  |
| 153.47                  | 121.62  | 63.63                              | less-open  |
| 153.66                  | 118.75  | 64.78                              | less-open  |
| 154.4                   | 130.48  | 60.1                               | less-open  |
| 154.4                   | 353.57  | 43.1                               | less-open  |
| 154.62                  | 127.18  | 57.43                              | less-open  |
| 154.76                  | 104.09  | 67.8                               | less-open  |
| 154.85                  | 124.56  | 65.62                              | less-open  |
| 155.01                  | 103.18  | 53.16                              | less-open  |
| 155.09                  | 343.8   | 50.71                              | less-open  |
| 155.2                   | 116.29  | 57.05                              | less-open  |
| 156.03                  | 350.76  | 43.44                              | less-open  |
| 156.69                  | 348.73  | 47.92                              | less-open  |
| 156.85                  | 337.43  | 40.13                              | less-open  |
| 157.09                  | 351.56  | 53.05                              | less-open  |
| 157.62                  | 342.85  | 53.98                              | less-open  |
| 158.24                  | 131.99  | 58.32                              | less-open  |
| 159.36                  | 294.35  | 28.72                              | less-open  |
| 159.67                  | 131.91  | 58.9                               | less-open  |
| 160.18                  | 124.08  | 57.21                              | less-open  |
| 160.22                  | 342.65  | 52.51                              | less-open  |
| 161.54                  | 128.07  | 54.83                              | less-open  |
| 161.7                   | 124.38  | 56.83                              | less-open  |
| 161.93                  | 142.26  | 43.55                              | less-open  |
| 162.15                  | 107.97  | 66.86                              | less-open  |
| 162.68                  | 350.1   | 47.24                              | less-open  |
| 162.69                  | 124.02  | 65.53                              | less-open  |
| 162.94                  | 325.41  | 61.76                              | less-open  |
| 163.26                  | 342.33  | 43.27                              | less-open  |
| 163.49                  | 351.46  | 54.91                              | less-open  |
| 163.86                  | 332.9   | 40.56                              | less-open  |
| 163.98                  | 305.8   | 44.52                              | less-open  |
| 164.13                  | 140.85  | 58.56                              | less-open  |
| 164.37                  | 342.46  | 39.91                              | less-open  |
| 164.6                   | 122.62  | 53.51                              | less-open  |
| 164.95                  | 139.88  | 49.65                              | less-open  |
| 165.21                  | 131.9   | 48.54                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 165.45                  | 144.99  | 53.61                              | less-open  |
| 166.06                  | 82.48   | 51.05                              | less-open  |
| 166.6                   | 69.69   | 55.95                              | less-open  |
| 166.98                  | 108.49  | 68.11                              | less-open  |
| 168.52                  | 136.96  | 64.22                              | less-open  |
| 168.82                  | 237.18  | 33.63                              | less-open  |
| 168.92                  | 133.44  | 70.67                              | less-open  |
| 169.65                  | 279.07  | 27.48                              | less-open  |
| 170.45                  | 107.96  | 63.68                              | less-open  |
| 170.84                  | 92.7  | 61.18                              | less-open  |
| 171.09                  | 128.76  | 54.02                              | less-open  |
| 171.39                  | 108.42  | 60.73                              | less-open  |
| 171.76                  | 287.77  | 60.83                              | less-open  |
| 171.98                  | 263.41  | 23.64                              | less-open  |
| 172.56                  | 295.17  | 28.02                              | less-open  |
| 173.05                  | 351.76  | 34.68                              | less-open  |
| 173.74                  | 112.22  | 69.34                              | less-open  |
| 174.05                  | 129.07  | 57.49                              | less-open  |
| 174.76                  | 26.99   | 38.98                              | less-open  |
| 175.57                  | 24.15   | 39.51                              | less-open  |
| 175.65                  | 278.15  | 60.07                              | less-open  |
| 175.77                  | 314.81  | 61.53                              | less-open  |
| 175.94                  | 346.81  | 51.68                              | less-open  |
| 177.35                  | 9.14  | 33.44                              | less-open  |
| 177.47                  | 319.98  | 31.74                              | less-open  |
| 177.81                  | 349.83  | 62.33                              | less-open  |
| 178.29                  | 319.35  | 62.48                              | less-open  |
| 179.02                  | 106.98  | 60.95                              | less-open  |
| 179.24                  | 99.37   | 61.16                              | less-open  |
| 180.05                  | 243.82  | 32.39                              | less-open  |
| 181.5                   | 317.12  | 15.72                              | less-open  |
| 181.94                  | 50.37   | 45.09                              | less-open  |
| 182.03                  | 245.15  | 34.86                              | less-open  |
| 182.65                  | 94.26   | 67.91                              | less-open  |
| 182.87                  | 260.05  | 43.53                              | less-open  |
| 182.98                  | 356.15  | 75.44                              | less-open  |
| 183.9                   | 343.91  | 65.59                              | less-open  |
| 184.13                  | 260.33  | 76.33                              | less-open  |
| 184.15                  | 347.41  | 68.25                              | less-open  |
| 185.77                  | 318.7   | 40.4                               | less-open  |
| 186.13                  | 73.7  | 41.56                              | less-open  |
| 186.35                  | 226.61  | 44.51                              | less-open  |
| 186.96                  | 118.81  | 58.6                               | less-open  |
| 187.67                  | 100.64  | 66.57                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 188.52                  | 109.8   | 64.59                              | less-open  |
| 189.02                  | 114.26  | 53.4                               | less-open  |
| 189.31                  | 69.75   | 34.35                              | less-open  |
| 189.7                   | 56.5  | 34.53                              | less-open  |
| 190.61                  | 342.45  | 78.68                              | less-open  |
| 191.63                  | 349.37  | 89.46                              | less-open  |

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| depth<br>(feet) | down-dip<br>compass<br>azimuth<br>(degrees) | dip<br>angle<br>(degrees) | interpreted<br>planar<br>feature<br>category |
|-----------------|---|---------------------------|--|
| 38.18           | 236.7                                       | 20.7                      | less-open                                    |
| 38.34           | 145.7                                       | 46.5                      | less-open                                    |
| 38.86           | 147.3                                       | 59.9                      | less-open                                    |
| 38.99           | 331.5                                       | 83.1                      | less-open                                    |
| 40.82           | 351.6                                       | 70.3                      | less-open                                    |
| 41.03           | 354.4                                       | 66.8                      | less-open                                    |
| 42.35           | 297.4                                       | 80.3                      | less-open                                    |
| 42.51           | 139.7                                       | 46.7                      | less-open                                    |
| 42.70           | 137.8                                       | 32.0                      | less-open                                    |
| 42.90           | 124.3                                       | 36.2                      | less-open                                    |
| 43.19           | 163.5                                       | 27.3                      | less-open                                    |
| 43.47           | 290.7                                       | 69.0                      | less-open                                    |
| 43.73           | 145.0                                       | 46.6                      | less-open                                    |
| 44.15           | 130.4                                       | 43.3                      | less-open                                    |
| 44.65           | 125.7                                       | 32.2                      | open   |
| 45.01           | 152.0                                       | 44.4                      | less-open                                    |
| 45.10           | 130.0                                       | 21.2                      | less-open                                    |
| 45.34           | 177.3                                       | 82.5                      | less-open                                    |
| 45.58           | 144.5                                       | 46.7                      | less-open                                    |
| 46.63           | 132.8                                       | 42.0                      | less-open                                    |
| 46.90           | 145.7                                       | 38.5                      | less-open                                    |
| 47.13           | 159.5                                       | 50.4                      | less-open                                    |
| 47.61           | 175.0                                       | 82.7                      | less-open                                    |
| 48.46           | 132.6                                       | 40.1                      | less-open                                    |
| 51.70           | 133.0                                       | 45.7                      | less-open                                    |
| 52.01           | 146.9                                       | 44.8                      | less-open                                    |
| 52.15           | 186.6                                       | 31.2                      | less-open                                    |
| 52.34           | 350.6                                       | 77.7                      | less-open                                    |
| 53.61           | 132.0                                       | 44.4                      | less-open                                    |
| 55.55           | 126.7                                       | 51.6                      | less-open                                    |
| 56.32           | 310.0                                       | 77.7                      | less-open                                    |
| 56.64           | 137.1                                       | 51.6                      | less-open                                    |
| 58.01           | 101.9                                       | 55.1                      | less-open                                    |
| 59.26           | 75.2  | 46.8                      | less-open                                    |
| 60.32           | 232.8                                       | 28.4                      | less-open                                    |
| 61.57           | 248.0                                       | 18.6                      | less-open                                    |
| 64.21           | 286.3                                       | 54.4                      | less-open                                    |
| 65.18           | 190.3                                       | 19.9                      | less-open                                    |
| 66.22           | 293.0                                       | 24.2                      | less-open                                    |
| 66.66           | 80.0  | 36.2                      | less-open                                    |
| 68.54           | 181.9                                       | 77.9                      | less-open                                    |
| 69.51           | 90.1  | 36.1                      | less-open                                    |
| 70.58           | 68.0  | 28.7                      | less-open                                    |
| 70.89           | 82.0  | 29.8                      | less-open                                    |

Note that down-dip compass azimuth is perpendicular to the strike direction.

Note that interpreted down-dip compass azimuths are with respect to magnetic north.

Down-dip azimuths & dip angles were corrected for borehole deviation from vertical.

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 71.09                   | 45.9  | 40.6                               | less-open  |
| 71.56                   | 293.7   | 38.0                               | less-open  |
| 71.92                   | 343.7   | 62.8                               | less-open  |
| 78.01                   | 108.8   | 76.7                               | less-open  |
| 79.38                   | 275.6   | 32.1                               | less-open  |

Fracture Orientations Interpreted from MW-66 Acoustic Televiewer Log  
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| depth<br>(feet) | down-dip<br>compass<br>azimuth<br>(degrees) | dip<br>angle<br>(degrees) | interpreted<br>planar<br>feature<br>category |
|-----------------|---|---------------------------|--|
| 38.15           | 354.8                                       | 22.8                      | open   |
| 38.35           | 336.5                                       | 28.3                      | open   |
| 39.06           | 308.3                                       | 13.5                      | less-open                                    |
| 39.83           | 332.3                                       | 30.0                      | open   |
| 40.18           | 281.5                                       | 19.9                      | less-open                                    |
| 40.40           | 180.8                                       | 63.0                      | less-open                                    |
| 40.52           | 328.2                                       | 16.2                      | less-open                                    |
| 41.46           | 309.0                                       | 41.9                      | less-open                                    |
| 41.79           | 197.6                                       | 77.0                      | less-open                                    |
| 41.81           | 167.1                                       | 76.5                      | less-open                                    |
| 41.98           | 314.6                                       | 32.6                      | less-open                                    |
| 42.17           | 280.7                                       | 29.9                      | less-open                                    |
| 43.15           | 4.9   | 23.3                      | open   |
| 43.27           | 184.9                                       | 75.5                      | less-open                                    |
| 43.75           | 189.6                                       | 61.9                      | open   |
| 44.00           | 191.1                                       | 66.1                      | open   |
| 44.19           | 185.5                                       | 66.4                      | less-open                                    |
| 44.82           | 213.2                                       | 69.9                      | less-open                                    |
| 44.86           | 202.1                                       | 36.7                      | less-open                                    |
| 45.88           | 149.2                                       | 31.4                      | less-open                                    |
| 46.24           | 321.8                                       | 56.2                      | less-open                                    |
| 46.27           | 232.6                                       | 32.9                      | less-open                                    |
| 46.59           | 291.5                                       | 42.1                      | less-open                                    |
| 46.97           | 131.7                                       | 37.5                      | less-open                                    |
| 47.38           | 159.3                                       | 32.7                      | less-open                                    |
| 47.44           | 153.5                                       | 29.9                      | less-open                                    |
| 47.68           | 338.6                                       | 38.4                      | less-open                                    |
| 47.96           | 325.2                                       | 55.0                      | open   |
| 48.39           | 177.9                                       | 81.5                      | less-open                                    |
| 48.54           | 21.4  | 78.2                      | less-open                                    |
| 49.07           | 185.1                                       | 32.3                      | less-open                                    |
| 49.67           | 146.4                                       | 19.0                      | less-open                                    |
| 49.78           | 190.7                                       | 42.5                      | open   |
| 50.32           | 345.5                                       | 33.6                      | less-open                                    |
| 50.61           | 341.1                                       | 24.7                      | open   |
| 51.15           | 134.4                                       | 76.5                      | less-open                                    |
| 51.34           | 132.2                                       | 48.6                      | less-open                                    |
| 52.95           | 121.8                                       | 57.4                      | less-open                                    |
| 53.58           | 110.6                                       | 47.7                      | less-open                                    |
| 53.68           | 225.2                                       | 70.3                      | open   |
| 54.66           | 345.6                                       | 28.8                      | less-open                                    |
| 54.99           | 287.8                                       | 34.2                      | less-open                                    |
| 56.72           | 324.2                                       | 52.4                      | less-open                                    |
| 57.44           | 96.3  | 76.7                      | less-open                                    |

Note that down-dip compass azimuth is perpendicular to the strike direction.

Note that interpreted down-dip compass azimuths are with respect to magnetic north.

Down-dip azimuths & dip angles were corrected for borehole deviation from vertical.

Fracture Orientations Interpreted from MW-66 Acoustic Televiewer Log  
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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 58.45                   | 86.7  | 82.3                               | less-open  |
| 59.46                   | 91.1  | 83.0                               | less-open  |
| 59.75                   | 244.8   | 74.1                               | less-open  |
| 61.20                   | 316.6   | 29.3                               | less-open  |
| 61.56                   | 288.9   | 24.5                               | less-open  |
| 63.81                   | 209.5   | 53.9                               | less-open  |
| 64.52                   | 118.5   | 45.1                               | less-open  |
| 65.84                   | 128.2   | 50.1                               | less-open  |
| 66.17                   | 98.8  | 28.4                               | less-open  |
| 66.20                   | 259.5   | 70.3                               | less-open  |
| 66.39                   | 134.4   | 37.8                               | less-open  |
| 69.24                   | 191.0   | 56.9                               | less-open  |
| 70.05                   | 116.98  | 45.29                              | less-open  |
| 71.3                    | 271.1   | 82.12                              | less-open  |
| 72.28                   | 85.1  | 28.4                               | less-open  |
| 73.02                   | 269.9   | 77.3                               | less-open  |
| 74.39                   | 346.8   | 29.7                               | less-open  |
| 74.85                   | 178.1   | 74.2                               | less-open  |
| 75.92                   | 189.6   | 82.3                               | less-open  |
| 81.78                   | 124.0   | 39.9                               | less-open  |
| 82.61                   | 356.2   | 80.1                               | less-open  |
| 84.24                   | 193.9   | 41.2                               | less-open  |
| 85.01                   | 177.4   | 79.2                               | less-open  |
| 85.30                   | 178.0   | 80.9                               | less-open  |
| 86.06                   | 186.1   | 55.1                               | less-open  |
| 86.61                   | 192.8   | 57.9                               | less-open  |
| 87.23                   | 174.3   | 67.5                               | less-open  |
| 87.92                   | 189.1   | 65.9                               | less-open  |
| 88.08                   | 176.6   | 72.9                               | less-open  |
| 88.59                   | 189.9   | 79.5                               | less-open  |
| 89.39                   | 157.2   | 77.5                               | less-open  |
| 89.59                   | 165.4   | 82.0                               | less-open  |
| 90.41                   | 170.5   | 77.0                               | less-open  |
| 90.69                   | 152.1   | 71.0                               | less-open  |
| 90.97                   | 168.4   | 76.7                               | less-open  |
| 92.04                   | 163.5   | 84.6                               | less-open  |
| 93.29                   | 169.6   | 81.9                               | less-open  |
| 94.19                   | 169.6   | 83.6                               | less-open  |
| 94.86                   | 162.7   | 26.5                               | less-open  |
| 95.13                   | 160.7   | 42.0                               | less-open  |
| 96.44                   | 179.8   | 79.1                               | less-open  |
| 96.45                   | 51.6  | 16.1                               | less-open  |
| 100.43                  | 292.4   | 59.7                               | less-open  |
| 100.92                  | 179.91  | 78.76                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 101.1                   | 111.7   | 55.83                              | less-open  |
| 101.87                  | 322.5   | 63.2                               | less-open  |
| 101.92                  | 174.9   | 76.3                               | less-open  |
| 103.15                  | 130.6   | 42.7                               | less-open  |
| 103.49                  | 127.9   | 51.0                               | less-open  |
| 104.35                  | 337.9   | 35.9                               | less-open  |
| 108.02                  | 178.9   | 78.9                               | less-open  |
| 108.03                  | 5.0   | 38.8                               | less-open  |
| 109.47                  | 189.2   | 42.4                               | less-open  |
| 110.60                  | 29.7  | 70.5                               | less-open  |
| 111.91                  | 214.8   | 54.0                               | less-open  |
| 112.63                  | 348.9   | 65.7                               | less-open  |
| 112.76                  | 351.9   | 62.2                               | less-open  |
| 112.80                  | 73.1  | 47.3                               | less-open  |
| 113.18                  | 170.8   | 77.8                               | less-open  |
| 113.89                  | 191.5   | 72.2                               | less-open  |
| 114.01                  | 188.5   | 75.5                               | less-open  |
| 114.77                  | 172.1   | 86.0                               | less-open  |
| 115.82                  | 182.8   | 75.5                               | less-open  |
| 116.06                  | 183.8   | 75.7                               | less-open  |
| 116.66                  | 180.3   | 78.7                               | less-open  |
| 117.61                  | 305.0   | 31.3                               | open   |
| 117.88                  | 336.1   | 38.3                               | less-open  |
| 118.17                  | 216.6   | 50.1                               | less-open  |
| 119.53                  | 232.5   | 61.9                               | less-open  |
| 120.57                  | 353.8   | 56.5                               | less-open  |
| 121.42                  | 334.0   | 58.6                               | less-open  |
| 122.12                  | 189.7   | 40.4                               | less-open  |
| 122.97                  | 208.5   | 51.6                               | less-open  |
| 123.23                  | 354.9   | 58.1                               | less-open  |
| 126.72                  | 355.7   | 36.0                               | less-open  |
| 127.43                  | 350.5   | 51.2                               | less-open  |
| 127.94                  | 343.9   | 40.5                               | less-open  |
| 128.25                  | 338.6   | 39.6                               | less-open  |
| 129.69                  | 341.0   | 55.6                               | less-open  |
| 130.05                  | 333.5   | 60.8                               | less-open  |
| 130.16                  | 205.0   | 53.1                               | less-open  |
| 130.62                  | 279.6   | 46.0                               | less-open  |
| 130.97                  | 213.0   | 38.7                               | less-open  |
| 131.21                  | 282.1   | 43.0                               | less-open  |
| 131.38                  | 203.5   | 46.4                               | less-open  |
| 131.84                  | 204.2   | 51.8                               | less-open  |
| 131.88                  | 351.7   | 75.8                               | less-open  |
| 132.13                  | 210.0   | 53.2                               | less-open  |



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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 132.66                  | 341.5   | 45.3                               | less-open  |
| 132.69                  | 15.59   | 76.88                              | less-open  |
| 132.77                  | 325.59  | 42.93                              | less-open  |
| 132.88                  | 329.9   | 42.2                               | less-open  |
| 133.42                  | 338.9   | 29.2                               | less-open  |
| 133.81                  | 311.5   | 58.5                               | less-open  |
| 133.85                  | 10.0  | 59.8                               | less-open  |
| 134.61                  | 94.9  | 74.5                               | less-open  |
| 134.76                  | 205.9   | 36.9                               | less-open  |
| 135.04                  | 302.0   | 37.3                               | less-open  |
| 135.47                  | 334.0   | 51.8                               | less-open  |
| 135.71                  | 326.7   | 41.4                               | less-open  |
| 135.87                  | 286.93  | 44.93                              | less-open  |
| 135.88                  | 157.81  | 54.39                              | less-open  |
| 136.39                  | 327.9   | 51.9                               | less-open  |
| 136.64                  | 313.0   | 34.9                               | less-open  |
| 136.82                  | 301.1   | 44.4                               | less-open  |
| 137.43                  | 296.8   | 40.8                               | less-open  |
| 137.5                   | 291.8   | 36.0                               | less-open  |
| 137.55                  | 257.6   | 20.7                               | less-open  |
| 137.68                  | 171.1   | 63.8                               | less-open  |
| 137.79                  | 296.7   | 37.3                               | less-open  |
| 138.22                  | 325.4   | 48.7                               | less-open  |
| 138.45                  | 337.4   | 52.3                               | less-open  |
| 138.71                  | 185.1   | 31.5                               | less-open  |
| 138.98                  | 200.0   | 45.3                               | less-open  |
| 139.16                  | 213.2   | 41.8                               | less-open  |
| 139.36                  | 167.4   | 43.8                               | less-open  |
| 139.86                  | 308.2   | 67.9                               | less-open  |
| 139.96                  | 205.0   | 56.6                               | less-open  |
| 140.9                   | 312.3   | 72.7                               | less-open  |
| 141.11                  | 336.7   | 23.1                               | less-open  |
| 141.74                  | 303.2   | 36.2                               | less-open  |
| 141.86                  | 109.2   | 55.4                               | less-open  |
| 141.88                  | 283.6   | 39.8                               | less-open  |
| 142.72                  | 124.3   | 58.4                               | less-open  |
| 143.02                  | 320.6   | 61.8                               | less-open  |
| 143.5                   | 240.7   | 59.4                               | less-open  |
| 143.56                  | 303.9   | 75.5                               | less-open  |
| 143.58                  | 316.2   | 56.3                               | less-open  |
| 144.04                  | 115.3   | 55.9                               | less-open  |
| 144.76                  | 114.2   | 62.8                               | less-open  |
| 144.85                  | 297.7   | 44.0                               | less-open  |
| 145.44                  | 310.9   | 53.7                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 145.44                  | 123.2   | 48.6                               | less-open  |
| 146.66                  | 336.8   | 54.8                               | less-open  |
| 146.93                  | 328.9   | 48.6                               | less-open  |
| 147.24                  | 158.9   | 42.2                               | less-open  |
| 148.77                  | 109.2   | 71.4                               | less-open  |
| 148.99                  | 102.0   | 56.1                               | less-open  |
| 149.16                  | 107.5   | 57.2                               | less-open  |
| 149.3                   | 101.9   | 51.8                               | less-open  |
| 150.56                  | 123.2   | 61.4                               | less-open  |
| 150.78                  | 102.6   | 51.0                               | less-open  |
| 151.33                  | 230.5   | 70.3                               | less-open  |
| 152.83                  | 143.0   | 38.0                               | less-open  |
| 154.53                  | 115.0   | 57.1                               | less-open  |
| 155.03                  | 109.2   | 63.4                               | less-open  |
| 155.39                  | 106.6   | 65.8                               | less-open  |
| 155.81                  | 112.0   | 62.6                               | less-open  |
| 156.19                  | 299.6   | 24.6                               | less-open  |
| 156.45                  | 332.2   | 30.3                               | less-open  |
| 157.03                  | 120.1   | 55.8                               | less-open  |
| 157.16                  | 321.8   | 34.9                               | less-open  |
| 157.75                  | 355.6   | 54.1                               | less-open  |
| 158.47                  | 144.1   | 55.2                               | less-open  |
| 158.7                   | 349.9   | 57.6                               | less-open  |
| 159.02                  | 329.3   | 41.8                               | less-open  |
| 159.95                  | 343.6   | 50.2                               | less-open  |
| 159.95                  | 109.2   | 44.1                               | less-open  |
| 160.58                  | 213.3   | 50.4                               | less-open  |
| 161.16                  | 288.4   | 36.4                               | less-open  |
| 161.73                  | 299.8   | 29.9                               | less-open  |
| 163.11                  | 104.2   | 43.9                               | less-open  |
| 163.45                  | 107.98  | 40.85                              | less-open  |
| 163.89                  | 353.09  | 41.88                              | less-open  |
| 164.15                  | 104.5   | 68.5                               | less-open  |
| 164.26                  | 108.0   | 58.1                               | less-open  |
| 164.37                  | 108.8   | 60.0                               | less-open  |
| 164.61                  | 349.9   | 54.0                               | less-open  |
| 164.67                  | 347.8   | 47.1                               | less-open  |
| 165.88                  | 316.6   | 44.0                               | less-open  |
| 166.51                  | 168.5   | 81.1                               | less-open  |
| 166.53                  | 322.0   | 42.7                               | less-open  |
| 167.67                  | 327.1   | 36.9                               | less-open  |
| 167.79                  | 313.4   | 42.2                               | less-open  |
| 167.81                  | 202.2   | 71.1                               | less-open  |
| 168.7                   | 230.2   | 71.6                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 169.15                  | 219.3   | 63.1                               | less-open  |
| 170.67                  | 335.1   | 51.5                               | less-open  |
| 170.94                  | 8.6   | 56.6                               | less-open  |
| 171.24                  | 318.0   | 60.3                               | less-open  |
| 173.63                  | 344.2   | 50.8                               | less-open  |
| 174.63                  | 322.0   | 44.6                               | less-open  |
| 175.1                   | 44.3  | 70.2                               | less-open  |
| 175.73                  | 324.8   | 52.4                               | less-open  |
| 175.98                  | 101.1   | 61.0                               | less-open  |
| 176.02                  | 283.3   | 38.1                               | less-open  |
| 176.57                  | 102.0   | 56.8                               | less-open  |
| 177.31                  | 332.2   | 59.9                               | less-open  |
| 178.31                  | 322.9   | 50.4                               | less-open  |
| 179.3                   | 326.3   | 41.4                               | less-open  |
| 179.86                  | 132.4   | 60.1                               | less-open  |
| 180.13                  | 308.3   | 41.7                               | less-open  |
| 180.66                  | 125.4   | 60.0                               | less-open  |
| 180.83                  | 333.1   | 57.7                               | less-open  |
| 180.88                  | 126.4   | 56.0                               | less-open  |
| 183                     | 185.2   | 76.0                               | less-open  |
| 184.01                  | 295.5   | 45.6                               | less-open  |
| 184.85                  | 126.2   | 41.8                               | less-open  |
| 187.41                  | 302.4   | 42.6                               | less-open  |
| 187.94                  | 302.9   | 52.6                               | less-open  |
| 189.36                  | 331.7   | 76.7                               | less-open  |
| 189.65                  | 287.1   | 32.8                               | less-open  |
| 190.39                  | 127.7   | 37.7                               | less-open  |
| 190.45                  | 328.1   | 48.4                               | less-open  |
| 190.72                  | 338.7   | 45.3                               | less-open  |
| 191.53                  | 289.8   | 29.6                               | less-open  |
| 195.62                  | 62.9  | 73.9                               | less-open  |
| 197.85                  | 124.3   | 51.9                               | less-open  |
| 198.36                  | 309.1   | 88.6                               | less-open  |
| 198.79                  | 311.6   | 86.7                               | less-open  |

Fracture Orientations Interpreted from MW-67 Acoustic Televiewer Log  
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| depth<br>(feet) | down-dip<br>compass<br>azimuth<br>(degrees) | dip<br>angle<br>(degrees) | interpreted<br>planar<br>feature<br>category |
|-----------------|---|---------------------------|--|
| 32.54           | 251.1                                       | 60.4                      | less-open                                    |
| 33.17           | 346.9                                       | 72.1                      | less-open                                    |
| 33.71           | 309.7                                       | 72.5                      | open   |
| 33.80           | 297.4                                       | 53.4                      | less-open                                    |
| 34.14           | 188.2                                       | 71.4                      | less-open                                    |
| 34.32           | 189.6                                       | 72.9                      | less-open                                    |
| 34.76           | 272.8                                       | 51.7                      | less-open                                    |
| 34.77           | 82.1  | 73.7                      | less-open                                    |
| 35.05           | 19.9  | 19.8                      | less-open                                    |
| 35.09           | 171.0                                       | 62.3                      | less-open                                    |
| 35.15           | 282.2                                       | 47.2                      | less-open                                    |
| 35.29           | 192.5                                       | 70.5                      | less-open                                    |
| 35.74           | 292.3                                       | 27.8                      | open   |
| 37.07           | 319.2                                       | 68.9                      | less-open                                    |
| 37.13           | 284.4                                       | 46.7                      | less-open                                    |
| 37.13           | 291.7                                       | 29.6                      | less-open                                    |
| 37.59           | 68.8  | 44.4                      | less-open                                    |
| 37.60           | 274.1                                       | 50.6                      | less-open                                    |
| 38.06           | 137.9                                       | 51.0                      | less-open                                    |
| 38.27           | 255.9                                       | 54.9                      | less-open                                    |
| 38.75           | 257.1                                       | 33.2                      | less-open                                    |
| 39.27           | 206.6                                       | 45.7                      | less-open                                    |
| 40.58           | 309.6                                       | 43.7                      | open   |
| 41.15           | 167.4                                       | 23.4                      | less-open                                    |
| 41.29           | 204.8                                       | 71.4                      | open   |
| 41.52           | 161.3                                       | 41.0                      | less-open                                    |
| 41.59           | 316.2                                       | 39.9                      | less-open                                    |
| 41.74           | 171.9                                       | 65.0                      | less-open                                    |
| 41.75           | 212.8                                       | 75.7                      | less-open                                    |
| 42.03           | 207.9                                       | 72.5                      | less-open                                    |
| 42.31           | 245.0                                       | 52.8                      | less-open                                    |
| 42.43           | 139.8                                       | 69.4                      | less-open                                    |
| 42.57           | 240.9                                       | 45.8                      | less-open                                    |
| 42.57           | 319.9                                       | 67.2                      | less-open                                    |
| 42.66           | 225.3                                       | 30.7                      | less-open                                    |
| 43.12           | 275.1                                       | 37.3                      | open   |
| 43.58           | 231.6                                       | 39.3                      | less-open                                    |
| 43.72           | 165.5                                       | 60.3                      | less-open                                    |
| 43.89           | 179.7                                       | 77.9                      | less-open                                    |
| 44.33           | 245.3                                       | 33.9                      | less-open                                    |
| 44.38           | 150.3                                       | 43.8                      | less-open                                    |
| 44.60           | 231.7                                       | 78.2                      | less-open                                    |
| 44.90           | 281.3                                       | 24.1                      | less-open                                    |
| 45.77           | 134.8                                       | 27.6                      | less-open                                    |

Note that down-dip compass azimuth is perpendicular to the strike direction.

Note that interpreted down-dip compass azimuths are with respect to magnetic north.

Down-dip azimuths & dip angles were corrected for borehole deviation from vertical.

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 46.53                   | 122.7   | 69.9                               | less-open  |
| 46.56                   | 145.4   | 68.4                               | less-open  |
| 48.20                   | 202.0   | 69.5                               | less-open  |
| 48.63                   | 208.3   | 65.9                               | less-open  |
| 48.75                   | 200.9   | 66.2                               | less-open  |
| 49.00                   | 221.4   | 63.9                               | less-open  |
| 49.23                   | 330.3   | 69.0                               | less-open  |
| 49.27                   | 201.9   | 62.0                               | less-open  |
| 50.13                   | 10.6  | 24.4                               | open   |
| 50.58                   | 92.7  | 20.0                               | less-open  |
| 52.47                   | 115.39  | 61.75                              | less-open  |
| 53.59                   | 122.52  | 57.78                              | less-open  |
| 54.25                   | 154.0   | 47.3                               | less-open  |
| 54.77                   | 179.6   | 30.5                               | less-open  |
| 56.60                   | 332.4   | 65.3                               | less-open  |
| 58.73                   | 315.0   | 44.9                               | less-open  |
| 58.90                   | 228.0   | 48.1                               | less-open  |
| 61.26                   | 178.4   | 59.5                               | less-open  |
| 62.04                   | 223.6   | 46.4                               | less-open  |
| 62.21                   | 229.9   | 39.5                               | less-open  |
| 64.34                   | 303.8   | 45.0                               | less-open  |
| 65.20                   | 138.9   | 46.1                               | less-open  |
| 66.52                   | 125.0   | 46.4                               | less-open  |
| 67.47                   | 332.4   | 74.7                               | less-open  |
| 67.64                   | 341.4   | 63.3                               | less-open  |
| 67.90                   | 321.9   | 57.1                               | less-open  |
| 69.65                   | 112.3   | 73.6                               | less-open  |
| 70.77                   | 343.3   | 56.4                               | less-open  |
| 71.36                   | 135.9   | 53.5                               | less-open  |
| 71.96                   | 319.4   | 54.4                               | less-open  |
| 73.58                   | 337.7   | 68.9                               | less-open  |
| 73.71                   | 322.0   | 62.2                               | less-open  |
| 73.92                   | 136.5   | 55.9                               | less-open  |
| 74.74                   | 121.7   | 61.6                               | less-open  |
| 76.06                   | 333.4   | 67.6                               | less-open  |
| 76.24                   | 124.8   | 67.3                               | less-open  |
| 77.54                   | 325.1   | 63.1                               | less-open  |
| 77.77                   | 331.9   | 65.8                               | less-open  |
| 77.93                   | 203.8   | 78.5                               | less-open  |
| 78.82                   | 108.2   | 62.5                               | less-open  |
| 79.05                   | 115.4   | 61.9                               | less-open  |
| 79.72                   | 327.21  | 68.85                              | less-open  |
| 81.25                   | 31.4  | 76.5                               | less-open  |
| 81.72                   | 343.7   | 34.7                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 82.67                   | 341.4   | 75.7                               | less-open  |
| 83.25                   | 116.0   | 69.4                               | less-open  |
| 84.12                   | 122.8   | 67.8                               | less-open  |
| 84.73                   | 106.7   | 73.9                               | less-open  |
| 85.10                   | 100.7   | 24.6                               | less-open  |
| 85.17                   | 121.3   | 71.5                               | less-open  |
| 85.39                   | 186.2   | 78.0                               | less-open  |
| 86.26                   | 322.6   | 57.4                               | less-open  |
| 87.30                   | 185.1   | 71.1                               | less-open  |
| 88.14                   | 327.9   | 69.2                               | less-open  |
| 88.17                   | 130.5   | 73.0                               | less-open  |
| 89.61                   | 329.2   | 58.5                               | less-open  |
| 91.21                   | 335.4   | 63.3                               | less-open  |
| 93.22                   | 259.6   | 49.8                               | less-open  |
| 94.34                   | 238.6   | 66.4                               | less-open  |
| 94.67                   | 221.6   | 71.8                               | less-open  |
| 94.94                   | 211.4   | 74.9                               | less-open  |
| 95.82                   | 108.0   | 78.0                               | less-open  |
| 97.07                   | 93.7  | 62.2                               | less-open  |
| 97.72                   | 179.2   | 79.8                               | less-open  |
| 97.86                   | 193.0   | 79.1                               | less-open  |
| 98.1                    | 342.6   | 61.5                               | less-open  |
| 99.51                   | 39.1  | 35.3                               | less-open  |
| 99.54                   | 182.4   | 75.1                               | less-open  |
| 100.58                  | 5.2   | 24.3                               | less-open  |
| 101.27                  | 8.2   | 35.4                               | less-open  |
| 101.78                  | 228.3   | 48.4                               | less-open  |
| 102.46                  | 196.0   | 40.9                               | less-open  |
| 102.47                  | 345.6   | 69.8                               | less-open  |
| 102.85                  | 201.5   | 25.8                               | less-open  |
| 103.38                  | 117.7   | 51.3                               | less-open  |
| 103.47                  | 131.3   | 45.9                               | less-open  |
| 103.75                  | 350.9   | 73.6                               | less-open  |
| 104.23                  | 164.8   | 46.5                               | less-open  |
| 104.59                  | 215.5   | 61.3                               | less-open  |
| 104.68                  | 347.3   | 66.5                               | less-open  |
| 105.26                  | 352.8   | 55.8                               | less-open  |
| 105.27                  | 344.2   | 74.3                               | less-open  |
| 106.01                  | 323.1   | 71.8                               | less-open  |
| 106.13                  | 244.3   | 53.3                               | open   |
| 106.46                  | 119.5   | 76.6                               | less-open  |
| 106.69                  | 183.5   | 81.7                               | less-open  |
| 107.03                  | 334.9   | 70.6                               | less-open  |
| 107.18                  | 124.36  | 64.36                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 107.4                   | 336.82  | 70.01                              | less-open  |
| 107.62                  | 209.9   | 56.7                               | less-open  |
| 108.31                  | 350.6   | 65.0                               | open   |
| 108.36                  | 191.6   | 30.4                               | less-open  |
| 108.48                  | 208.4   | 44.4                               | less-open  |
| 109                     | 173.4   | 26.5                               | less-open  |
| 109.37                  | 352.5   | 66.1                               | less-open  |
| 109.55                  | 121.3   | 34.7                               | less-open  |
| 109.72                  | 118.3   | 68.1                               | less-open  |
| 110.42                  | 28.6  | 5.7                                | less-open  |
| 110.53                  | 49.31   | 9.32                               | less-open  |
| 112.27                  | 354.12  | 75.52                              | less-open  |
| 112.28                  | 312.0   | 65.8                               | less-open  |
| 112.68                  | 350.2   | 71.1                               | less-open  |
| 112.99                  | 345.8   | 72.3                               | less-open  |
| 113.18                  | 343.0   | 67.1                               | less-open  |
| 113.24                  | 215.8   | 40.8                               | less-open  |
| 114.56                  | 348.5   | 61.7                               | less-open  |
| 115.13                  | 155.4   | 32.3                               | less-open  |
| 115.27                  | 334.0   | 64.3                               | less-open  |
| 115.99                  | 140.2   | 52.0                               | less-open  |
| 116.04                  | 304.8   | 63.3                               | less-open  |
| 116.04                  | 342.4   | 62.4                               | less-open  |
| 116.8                   | 331.8   | 56.1                               | less-open  |
| 117.03                  | 334.3   | 46.8                               | less-open  |
| 117.2                   | 322.6   | 38.5                               | less-open  |
| 118.85                  | 315.5   | 58.3                               | less-open  |
| 120.13                  | 325.0   | 51.6                               | less-open  |
| 120.85                  | 76.0  | 64.2                               | less-open  |
| 121.48                  | 74.9  | 65.1                               | less-open  |
| 121.97                  | 105.4   | 64.5                               | less-open  |
| 122.32                  | 353.7   | 80.5                               | less-open  |
| 122.56                  | 211.3   | 74.7                               | less-open  |
| 122.97                  | 109.4   | 74.0                               | less-open  |
| 123.33                  | 359.1   | 52.1                               | less-open  |
| 124.1                   | 315.0   | 48.4                               | less-open  |
| 124.52                  | 187.6   | 72.6                               | less-open  |
| 124.66                  | 302.8   | 63.6                               | less-open  |
| 125.41                  | 306.4   | 38.3                               | less-open  |
| 125.5                   | 309.1   | 41.3                               | less-open  |
| 125.64                  | 168.7   | 38.3                               | less-open  |
| 125.86                  | 105.7   | 64.6                               | less-open  |
| 127.43                  | 349.8   | 40.4                               | less-open  |
| 128.1                   | 224.6   | 70.5                               | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 130.01                  | 341.1   | 31.3                               | less-open  |
| 130.59                  | 178.3   | 69.5                               | less-open  |
| 130.71                  | 316.6   | 37.1                               | less-open  |
| 130.83                  | 177.1   | 71.2                               | less-open  |
| 131.18                  | 167.6   | 75.9                               | less-open  |
| 131.76                  | 182.6   | 69.5                               | less-open  |
| 133.27                  | 173.7   | 71.0                               | less-open  |
| 134.59                  | 16.9  | 37.1                               | less-open  |
| 135.11                  | 176.5   | 75.4                               | less-open  |
| 135.36                  | 346.1   | 35.5                               | less-open  |
| 136.09                  | 183.1   | 74.4                               | less-open  |
| 136.51                  | 176.0   | 74.4                               | less-open  |
| 136.6                   | 333.7   | 47.3                               | less-open  |
| 136.83                  | 191.7   | 70.3                               | less-open  |
| 137.64                  | 185.2   | 69.8                               | less-open  |
| 137.85                  | 184.4   | 68.3                               | less-open  |
| 138.38                  | 244.4   | 66.6                               | less-open  |
| 138.95                  | 240.5   | 57.3                               | less-open  |
| 140.07                  | 169.7   | 70.7                               | less-open  |
| 140.49                  | 203.9   | 13.8                               | less-open  |
| 140.99                  | 197.0   | 48.1                               | less-open  |
| 141.34                  | 204.2   | 45.2                               | less-open  |
| 141.81                  | 10.2  | 63.8                               | less-open  |
| 142.07                  | 113.5   | 49.1                               | less-open  |
| 142.37                  | 2.8   | 80.3                               | less-open  |
| 143.37                  | 356.8   | 80.7                               | less-open  |
| 144.77                  | 344.6   | 52.0                               | less-open  |
| 145.31                  | 340.5   | 48.9                               | less-open  |
| 146.19                  | 336.8   | 74.42                              | less-open  |
| 147.42                  | 135.33  | 51.39                              | less-open  |
| 148.03                  | 134.6   | 51.9                               | less-open  |
| 148.44                  | 116.6   | 54.8                               | less-open  |
| 148.94                  | 133.5   | 46.8                               | less-open  |
| 149.37                  | 108.1   | 44.7                               | less-open  |
| 149.49                  | 320.3   | 40.9                               | less-open  |
| 149.57                  | 141.1   | 48.1                               | less-open  |
| 149.82                  | 126.1   | 57.0                               | less-open  |
| 150.44                  | 306.0   | 49.1                               | less-open  |
| 150.84                  | 186.8   | 47.4                               | less-open  |
| 154.45                  | 340.5   | 42.8                               | less-open  |
| 156.42                  | 191.3   | 35.2                               | less-open  |
| 156.77                  | 175.9   | 54.7                               | less-open  |
| 157.68                  | 0.9   | 73.1                               | less-open  |
| 158.63                  | 188.0   | 53.7                               | less-open  |



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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 158.92                  | 346.9   | 72.0                               | less-open  |
| 159.12                  | 226.3   | 38.8                               | less-open  |
| 159.52                  | 210.9   | 58.1                               | less-open  |
| 159.79                  | 268.3   | 26.6                               | less-open  |
| 159.92                  | 253.8   | 27.5                               | less-open  |
| 160.54                  | 123.3   | 56.8                               | less-open  |
| 160.83                  | 109.0   | 58.7                               | less-open  |
| 160.83                  | 181.5   | 77.7                               | less-open  |
| 160.83                  | 292.0   | 29.0                               | less-open  |
| 160.97                  | 193.5   | 67.0                               | less-open  |
| 161.46                  | 199.2   | 54.1                               | less-open  |
| 161.73                  | 198.1   | 64.2                               | less-open  |
| 161.82                  | 218.8   | 57.8                               | less-open  |
| 161.99                  | 129.5   | 68.0                               | less-open  |
| 162.3                   | 109.2   | 57.9                               | less-open  |
| 163.27                  | 171.6   | 77.0                               | less-open  |
| 163.87                  | 338.6   | 26.7                               | less-open  |
| 164.42                  | 172.0   | 24.1                               | less-open  |
| 165.78                  | 169.0   | 30.8                               | less-open  |
| 166.02                  | 283.5   | 60.5                               | less-open  |
| 166.38                  | 3.1   | 56.2                               | less-open  |
| 166.47                  | 179.7   | 49.2                               | less-open  |
| 167.12                  | 225.4   | 52.6                               | less-open  |
| 167.9                   | 171.0   | 57.9                               | less-open  |
| 168.36                  | 233.4   | 45.9                               | less-open  |
| 168.86                  | 9.3   | 35.6                               | less-open  |
| 170.74                  | 347.1   | 75.4                               | less-open  |
| 171.11                  | 291.1   | 26.1                               | less-open  |
| 173.3                   | 311.9   | 69.7                               | less-open  |
| 173.37                  | 99.3  | 68.7                               | less-open  |
| 174.02                  | 291.8   | 68.5                               | less-open  |
| 174.84                  | 288.8   | 69.9                               | less-open  |
| 175.07                  | 1.78  | 46.13                              | less-open  |
| 175.4                   | 96.71   | 66.18                              | less-open  |
| 175.8                   | 97.8  | 64.9                               | less-open  |
| 176.32                  | 286.0   | 79.0                               | less-open  |
| 176.37                  | 104.9   | 48.6                               | less-open  |
| 176.71                  | 99.0  | 51.6                               | less-open  |
| 176.75                  | 297.4   | 55.8                               | less-open  |
| 177.1                   | 299.5   | 82.6                               | less-open  |
| 178.98                  | 130.4   | 26.6                               | less-open  |
| 179.14                  | 204.5   | 24.2                               | less-open  |
| 179.62                  | 129.1   | 59.6                               | less-open  |
| 180.05                  | 110.45  | 64.54                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 180.14                  | 113.2   | 64.5                               | less-open  |
| 180.98                  | 100.55  | 61.17                              | less-open  |
| 181.27                  | 104.26  | 35.35                              | less-open  |
| 181.47                  | 115.67  | 72.62                              | less-open  |
| 182.81                  | 313.72  | 58.29                              | less-open  |
| 183.4                   | 324.21  | 76.37                              | less-open  |
| 184.36                  | 294.02  | 63.7                               | less-open  |
| 184.66                  | 331.65  | 74.92                              | less-open  |
| 186.3                   | 329.3   | 59.12                              | less-open  |
| 187.1                   | 111.22  | 69.92                              | less-open  |
| 187.45                  | 323   | 54.33                              | less-open  |
| 188.04                  | 326.34  | 39.07                              | less-open  |
| 188.4                   | 145.95  | 42.86                              | less-open  |
| 188.51                  | 325.8   | 33.15                              | less-open  |
| 188.78                  | 93.75   | 67.49                              | less-open  |
| 190.61                  | 128.68  | 70.64                              | less-open  |
| 190.63                  | 124.39  | 64.52                              | less-open  |
| 190.83                  | 348.16  | 69.86                              | less-open  |
| 191.14                  | 304.9   | 44.31                              | less-open  |
| 192.68                  | 115.36  | 49.55                              | less-open  |
| 192.71                  | 300.78  | 54.16                              | less-open  |
| 193                     | 108.94  | 53.4                               | less-open  |
| 193.18                  | 126.62  | 62.27                              | less-open  |
| 193.4                   | 112.41  | 66.14                              | less-open  |
| 193.67                  | 102.94  | 66.99                              | less-open  |
| 193.98                  | 100.61  | 61.3                               | less-open  |
| 194.33                  | 329.91  | 64.28                              | less-open  |
| 194.84                  | 106.59  | 64.38                              | less-open  |
| 195.16                  | 297.94  | 67.89                              | less-open  |
| 195.27                  | 107.19  | 60.91                              | less-open  |
| 196.97                  | 335.89  | 41.99                              | less-open  |
| 197.37                  | 334.78  | 51.7                               | less-open  |
| 197.93                  | 4.69  | 65.65                              | less-open  |
| 198.49                  | 327.17  | 66.62                              | less-open  |
| 198.82                  | 345.72  | 58.97                              | less-open  |
| 198.99                  | 324.32  | 55.1                               | less-open  |
| 199.33                  | 307.22  | 56.71                              | less-open  |
| 201.26                  | 331.48  | 43.72                              | less-open  |
| 203.52                  | 341.76  | 66.03                              | less-open  |
| 203.65                  | 330.43  | 67.69                              | less-open  |
| 204.51                  | 326.22  | 42.42                              | less-open  |
| 206.48                  | 341.55  | 60.23                              | less-open  |
| 206.88                  | 331.01  | 55.49                              | less-open  |
| 207.55                  | 317.44  | 29.34                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 207.72                  | 314.89  | 46.24                              | less-open  |
| 207.83                  | 6.66  | 39.9                               | less-open  |
| 208.58                  | 348.9   | 40.4                               | less-open  |
| 208.71                  | 349.28  | 38.4                               | less-open  |
| 209.24                  | 334.4   | 60.54                              | less-open  |
| 212.04                  | 225.55  | 72.68                              | less-open  |
| 212.81                  | 140.24  | 58.69                              | less-open  |
| 213.09                  | 339.84  | 61.08                              | less-open  |
| 213.27                  | 335.45  | 63.39                              | less-open  |
| 213.5                   | 343.13  | 55.3                               | less-open  |
| 214                     | 351.87  | 47.84                              | less-open  |
| 214.28                  | 341.34  | 55.32                              | less-open  |
| 214.77                  | 4.92  | 55.47                              | less-open  |
| 216.96                  | 10.21   | 67.31                              | less-open  |
| 218                     | 322.02  | 69.09                              | less-open  |
| 218.57                  | 342.81  | 68.05                              | less-open  |
| 219.58                  | 223.95  | 52.5                               | less-open  |
| 220.28                  | 338.13  | 58.73                              | less-open  |
| 220.41                  | 329.03  | 61.11                              | less-open  |
| 220.7                   | 324.84  | 55.53                              | less-open  |
| 221.23                  | 323.59  | 55.11                              | less-open  |
| 221.64                  | 321.08  | 42.12                              | open   |
| 222.15                  | 330.46  | 38.41                              | less-open  |
| 222.83                  | 312.19  | 49.43                              | less-open  |
| 222.94                  | 330.19  | 49.1                               | less-open  |
| 222.99                  | 313.91  | 47.21                              | less-open  |
| 223.16                  | 256.86  | 9.07                               | less-open  |
| 223.71                  | 335.55  | 65.01                              | less-open  |
| 224.72                  | 25.4  | 32.49                              | less-open  |
| 225.59                  | 128.46  | 53.91                              | less-open  |
| 226.14                  | 190.24  | 60.82                              | less-open  |
| 226.28                  | 107.06  | 45.9                               | less-open  |
| 226.77                  | 117.51  | 26.6                               | less-open  |
| 226.85                  | 305.23  | 35.88                              | less-open  |
| 227.02                  | 118.67  | 56.89                              | less-open  |
| 227.78                  | 162.25  | 68.4                               | less-open  |
| 227.9                   | 129.83  | 40.18                              | less-open  |
| 228.61                  | 222.04  | 66.65                              | less-open  |
| 229.48                  | 120.05  | 48.11                              | less-open  |
| 230.58                  | 238.4   | 81.26                              | less-open  |
| 230.6                   | 160.82  | 60.93                              | less-open  |
| 231.31                  | 256.82  | 71.24                              | less-open  |
| 231.35                  | 306.5   | 30.05                              | less-open  |
| 231.55                  | 193.1   | 31.97                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 233.46                  | 102.97  | 49.58                              | less-open  |
| 233.57                  | 330.04  | 57.59                              | less-open  |
| 234.85                  | 124.92  | 59.51                              | less-open  |
| 235.75                  | 127.27  | 45.84                              | less-open  |
| 235.96                  | 352.45  | 65.23                              | less-open  |
| 236.92                  | 281.92  | 19.01                              | less-open  |
| 237.66                  | 116.75  | 55.68                              | less-open  |
| 238                     | 118.21  | 50.12                              | less-open  |
| 238.46                  | 295.47  | 43.36                              | less-open  |
| 239.9                   | 341.54  | 61.1                               | less-open  |
| 240.35                  | 26.33   | 73.9                               | less-open  |
| 244.22                  | 140.43  | 49.32                              | less-open  |
| 244.39                  | 332.41  | 71.72                              | less-open  |
| 244.72                  | 43.47   | 30.31                              | less-open  |
| 244.86                  | 298.98  | 29.98                              | less-open  |
| 245.15                  | 121.34  | 42.7                               | less-open  |
| 245.4                   | 124.97  | 52.18                              | less-open  |
| 245.69                  | 114.34  | 52.67                              | less-open  |
| 245.9                   | 119.2   | 52.2                               | less-open  |
| 246.03                  | 119.2   | 52.14                              | less-open  |
| 246.62                  | 121.77  | 56.09                              | less-open  |
| 247.7                   | 329.25  | 66.69                              | less-open  |
| 248.07                  | 111.64  | 42.2                               | less-open  |
| 249.33                  | 338.82  | 58.63                              | less-open  |
| 250.03                  | 338.23  | 56.9                               | less-open  |
| 250.1                   | 340.16  | 57.78                              | less-open  |
| 250.31                  | 341.31  | 52.17                              | less-open  |
| 250.61                  | 355.65  | 62.41                              | less-open  |
| 250.79                  | 333.56  | 50.58                              | less-open  |
| 250.97                  | 347.82  | 59.71                              | less-open  |
| 251.21                  | 346.66  | 56.54                              | less-open  |
| 252.2                   | 355.82  | 62.4                               | less-open  |
| 252.28                  | 4.83  | 59.16                              | less-open  |
| 252.51                  | 109.46  | 44.65                              | less-open  |
| 252.56                  | 116.17  | 51.66                              | less-open  |
| 252.88                  | 324.65  | 33.13                              | less-open  |
| 253.2                   | 344.67  | 53.97                              | less-open  |
| 253.58                  | 349.67  | 54.17                              | less-open  |
| 253.7                   | 108.44  | 42.94                              | less-open  |
| 253.96                  | 95.13   | 40.23                              | less-open  |
| 254.18                  | 190.25  | 38.88                              | less-open  |
| 254.33                  | 106.5   | 31.86                              | less-open  |
| 254.4                   | 294.77  | 58.97                              | less-open  |
| 254.55                  | 285.04  | 49.66                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 254.61                  | 106.52  | 37.12                              | less-open  |
| 254.96                  | 110.09  | 28.37                              | less-open  |
| 255.2                   | 99.62   | 39.6                               | less-open  |
| 255.24                  | 343.52  | 68.83                              | less-open  |
| 255.56                  | 352.44  | 68.07                              | less-open  |
| 256.09                  | 105.44  | 41.56                              | less-open  |
| 257.1                   | 112.27  | 45.91                              | less-open  |
| 257.3                   | 351.26  | 76.53                              | less-open  |
| 257.44                  | 97.05   | 34.35                              | less-open  |
| 258.58                  | 188.99  | 84.17                              | less-open  |
| 259.28                  | 113.01  | 62.31                              | less-open  |
| 259.92                  | 354.62  | 77.79                              | less-open  |
| 260.82                  | 354.71  | 77.56                              | less-open  |
| 261.25                  | 352.49  | 80.01                              | less-open  |
| 261.43                  | 109.94  | 67                                 | less-open  |
| 261.58                  | 357.47  | 76.58                              | less-open  |
| 262.6                   | 354.53  | 83.34                              | less-open  |
| 262.71                  | 328.47  | 34.86                              | less-open  |
| 262.77                  | 333.42  | 28.6                               | less-open  |
| 262.92                  | 316.43  | 27.58                              | less-open  |
| 263.21                  | 109.44  | 46.47                              | less-open  |
| 263.55                  | 304.16  | 59.64                              | less-open  |
| 264.85                  | 119.73  | 50.52                              | less-open  |
| 265.04                  | 116.22  | 48.51                              | less-open  |
| 265.3                   | 117.35  | 60.48                              | less-open  |
| 265.51                  | 349.33  | 78.79                              | less-open  |
| 265.82                  | 115.72  | 47.01                              | less-open  |
| 266.2                   | 346.61  | 72.49                              | less-open  |
| 266.31                  | 322.38  | 58.28                              | less-open  |
| 266.71                  | 73.22   | 60.38                              | less-open  |
| 267                     | 61.38   | 62.1                               | less-open  |
| 267.69                  | 122.42  | 48.71                              | less-open  |
| 267.88                  | 65.82   | 76.42                              | less-open  |
| 268.32                  | 334.82  | 62.39                              | open   |
| 268.48                  | 321.8   | 57.88                              | less-open  |
| 268.68                  | 330.71  | 70.06                              | less-open  |
| 269.16                  | 342.06  | 67.28                              | less-open  |
| 269.28                  | 341.3   | 62.55                              | less-open  |
| 269.57                  | 121   | 46.42                              | less-open  |
| 269.91                  | 111.37  | 62.53                              | less-open  |
| 269.99                  | 341.17  | 74.91                              | less-open  |
| 270.34                  | 132.53  | 46.04                              | less-open  |
| 270.5                   | 321.55  | 54.74                              | less-open  |
| 270.96                  | 32.23   | 24.54                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 271.77                  | 333.34  | 55.66                              | less-open  |
| 272.43                  | 120.11  | 48.41                              | less-open  |
| 273.19                  | 316.51  | 39.86                              | less-open  |
| 274.02                  | 172.61  | 75.74                              | less-open  |
| 274.82                  | 170.35  | 44.48                              | less-open  |
| 275.32                  | 123.78  | 39.27                              | less-open  |
| 275.5                   | 133.52  | 52.64                              | less-open  |
| 276.26                  | 311.15  | 44.95                              | less-open  |
| 276.36                  | 309.79  | 40.68                              | less-open  |
| 276.47                  | 311.22  | 51.82                              | less-open  |
| 276.75                  | 316.57  | 37.79                              | open   |
| 276.89                  | 319.77  | 37.09                              | less-open  |
| 277.73                  | 182.23  | 56.4                               | less-open  |
| 277.99                  | 346.04  | 74.18                              | less-open  |
| 278.4                   | 347   | 70.77                              | less-open  |
| 278.57                  | 224.02  | 20.46                              | less-open  |
| 279.91                  | 324.13  | 42.46                              | open   |
| 280.01                  | 143.87  | 42.13                              | less-open  |
| 280.34                  | 133.51  | 39.91                              | less-open  |
| 280.82                  | 148.22  | 46.88                              | less-open  |
| 280.95                  | 138.04  | 44.54                              | less-open  |
| 281.18                  | 142.02  | 44.93                              | less-open  |
| 281.73                  | 124.93  | 44.4                               | less-open  |
| 282.15                  | 330.66  | 48.8                               | less-open  |
| 282.72                  | 346.89  | 66.37                              | less-open  |
| 282.77                  | 324.08  | 36.31                              | less-open  |
| 282.88                  | 126.34  | 56.23                              | less-open  |
| 283.98                  | 288.8   | 22.41                              | less-open  |
| 285.37                  | 339.67  | 61.38                              | less-open  |
| 286.52                  | 298.28  | 68.16                              | less-open  |
| 287.64                  | 283.55  | 24.78                              | less-open  |
| 287.9                   | 296.84  | 73.64                              | less-open  |
| 288.15                  | 139.56  | 40.09                              | less-open  |
| 288.23                  | 124   | 38.51                              | less-open  |
| 288.23                  | 307.26  | 72.25                              | less-open  |
| 288.33                  | 144.78  | 41.82                              | less-open  |
| 288.47                  | 128   | 53.19                              | less-open  |
| 288.66                  | 112.43  | 55.52                              | less-open  |
| 290.53                  | 303.72  | 79.05                              | less-open  |
| 290.72                  | 309.21  | 58.71                              | less-open  |
| 291.17                  | 306.01  | 46.3                               | less-open  |
| 291.5                   | 313.58  | 39.27                              | less-open  |
| 292.38                  | 327.15  | 51.84                              | less-open  |
| 293.27                  | 267.07  | 75.88                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 293.35                  | 348.8   | 44.17                              | less-open  |
| 294.94                  | 303.29  | 33.74                              | less-open  |
| 295.94                  | 286.86  | 30.32                              | less-open  |
| 296.75                  | 295.71  | 44.93                              | less-open  |
| 298.89                  | 94.5  | 57.99                              | less-open  |
| 301.24                  | 114.52  | 36.62                              | less-open  |
| 301.28                  | 140.69  | 45.56                              | less-open  |
| 301.53                  | 112.5   | 52.03                              | less-open  |
| 301.99                  | 76.34   | 65.3                               | less-open  |
| 302.53                  | 348.53  | 45.5                               | less-open  |
| 302.62                  | 101.83  | 50.54                              | less-open  |
| 302.63                  | 338.76  | 50.85                              | less-open  |
| 302.78                  | 131.4   | 30.04                              | less-open  |
| 302.89                  | 326.77  | 51.97                              | less-open  |
| 302.98                  | 326.01  | 54.75                              | less-open  |
| 303.06                  | 99.07   | 55.62                              | less-open  |
| 303.23                  | 105.66  | 48.9                               | less-open  |
| 303.36                  | 326.15  | 52.41                              | less-open  |
| 303.63                  | 333.18  | 55.53                              | less-open  |
| 303.78                  | 306.16  | 34.56                              | less-open  |
| 303.96                  | 127.25  | 49.87                              | less-open  |
| 304.42                  | 337.37  | 23.63                              | less-open  |
| 304.43                  | 119.96  | 52.43                              | less-open  |
| 304.57                  | 120.81  | 47.62                              | less-open  |
| 304.7                   | 100.84  | 57.37                              | less-open  |
| 304.75                  | 146.97  | 34.46                              | less-open  |
| 304.77                  | 323.9   | 36.73                              | less-open  |
| 305.12                  | 123.36  | 47.54                              | less-open  |
| 305.52                  | 331.02  | 53.53                              | less-open  |
| 306.65                  | 325.5   | 50.83                              | less-open  |
| 308.35                  | 170.02  | 48.13                              | less-open  |
| 308.74                  | 316.59  | 53.17                              | less-open  |
| 308.86                  | 110.12  | 41.37                              | less-open  |
| 309.23                  | 337.69  | 67.75                              | less-open  |
| 309.64                  | 306.86  | 63.02                              | less-open  |
| 310.28                  | 123.5   | 45.9                               | less-open  |
| 311.91                  | 125.65  | 45.35                              | less-open  |
| 313.23                  | 172.72  | 43.66                              | less-open  |
| 313.41                  | 194.1   | 52.02                              | less-open  |
| 313.81                  | 133.97  | 45.58                              | less-open  |
| 315.1                   | 178.69  | 42.09                              | less-open  |
| 315.62                  | 156.26  | 45.65                              | less-open  |
| 316.36                  | 116.02  | 44.64                              | less-open  |
| 316.66                  | 121.77  | 36.29                              | less-open  |

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 318.2                   | 264.89  | 26.31                              | less-open  |
| 321.7                   | 345.84  | 75.33                              | less-open  |
| 322.52                  | 326.26  | 64.07                              | less-open  |
| 324.79                  | 355.46  | 51.14                              | less-open  |
| 324.94                  | 354.22  | 45.36                              | less-open  |
| 325.2                   | 133.66  | 50.55                              | less-open  |
| 325.83                  | 116.85  | 59.07                              | less-open  |
| 326.35                  | 84.85   | 41.55                              | less-open  |
| 326.38                  | 95.84   | 66.25                              | less-open  |
| 326.7                   | 92.13   | 42.06                              | less-open  |
| 326.92                  | 120.62  | 61.35                              | less-open  |
| 327.09                  | 133.81  | 37.99                              | less-open  |
| 327.18                  | 342.4   | 61.29                              | less-open  |
| 327.25                  | 117.36  | 57.42                              | less-open  |
| 327.44                  | 297.04  | 38.86                              | less-open  |
| 327.77                  | 138.65  | 40.12                              | less-open  |
| 328.32                  | 111.04  | 40.69                              | less-open  |
| 328.42                  | 95  | 70.18                              | less-open  |
| 328.75                  | 118.57  | 63.83                              | less-open  |
| 328.95                  | 123.47  | 58.16                              | less-open  |
| 329.39                  | 129.95  | 50.85                              | less-open  |
| 329.71                  | 113.89  | 48.32                              | less-open  |
| 329.84                  | 114.28  | 39.07                              | less-open  |
| 329.97                  | 116.57  | 46.26                              | less-open  |
| 332.51                  | 337.86  | 48.59                              | less-open  |
| 333.59                  | 337.13  | 60.34                              | less-open  |
| 334.4                   | 104.55  | 50.05                              | less-open  |
| 334.53                  | 326.15  | 38.93                              | less-open  |
| 335.73                  | 67.24   | 43.85                              | less-open  |
| 335.82                  | 219.16  | 37.64                              | less-open  |
| 336.02                  | 295.18  | 33.32                              | less-open  |
| 336.78                  | 287.45  | 83.11                              | less-open  |
| 337.91                  | 218.78  | 41.71                              | less-open  |



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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 30.12                   | 132.5   | 48.5                               | less-open  |
| 30.65                   | 136.9   | 53.6                               | less-open  |
| 30.88                   | 142.7   | 48.5                               | less-open  |
| 32.63                   | 182.9   | 54.9                               | less-open  |
| 32.95                   | 168.8   | 52.6                               | less-open  |
| 33.76                   | 160.5   | 49.4                               | less-open  |
| 34.17                   | 175.3   | 43.0                               | less-open  |
| 34.63                   | 161.6   | 50.4                               | less-open  |
| 35.19                   | 171.3   | 46.5                               | less-open  |
| 36.39                   | 175.6   | 51.0                               | less-open  |
| 36.92                   | 104.6   | 28.7                               | less-open  |
| 38.55                   | 303.6   | 68.4                               | less-open  |
| 38.55                   | 170.5   | 50.6                               | less-open  |
| 38.73                   | 9.7   | 66.7                               | less-open  |
| 41.34                   | 154.3   | 40.3                               | less-open  |
| 42.85                   | 171.9   | 52.1                               | less-open  |
| 43.36                   | 154.6   | 47.6                               | less-open  |
| 44.05                   | 167.2   | 67.4                               | less-open  |
| 45.27                   | 206.2   | 15.2                               | less-open  |
| 46.47                   | 188.2   | 69.4                               | less-open  |
| 47.00                   | 179.5   | 56.6                               | less-open  |
| 47.24                   | 170.0   | 53.5                               | less-open  |
| 47.97                   | 165.1   | 51.8                               | less-open  |
| 48.60                   | 191.3   | 64.1                               | less-open  |
| 49.62                   | 187.1   | 54.9                               | less-open  |
| 50.41                   | 191.5   | 61.6                               | less-open  |
| 51.24                   | 169.6   | 48.3                               | less-open  |
| 51.55                   | 170.6   | 52.5                               | less-open  |
| 52.01                   | 182.2   | 51.3                               | less-open  |
| 52.47                   | 184.4   | 52.9                               | less-open  |
| 53.06                   | 189.9   | 51.4                               | less-open  |
| 53.69                   | 180.5   | 59.2                               | less-open  |
| 53.92                   | 190.8   | 55.1                               | less-open  |
| 54.27                   | 174.47  | 52.55                              | less-open  |
| 54.75                   | 150.1   | 44.4                               | less-open  |
| 55.28                   | 162.5   | 49.2                               | less-open  |
| 55.56                   | 165.54  | 55.28                              | less-open  |
| 55.81                   | 152.59  | 49.12                              | less-open  |
| 56.53                   | 155.2   | 51.3                               | less-open  |
| 56.83                   | 153.2   | 52.5                               | less-open  |
| 57.17                   | 348.0   | 36.3                               | less-open  |
| 57.22                   | 164.4   | 57.5                               | less-open  |
| 58.30                   | 189.6   | 50.3                               | less-open  |
| 58.47                   | 184.5   | 54.8                               | less-open  |

Note that down-dip compass azimuth is perpendicular to the strike direction.

Note that interpreted down-dip compass azimuths are with respect to magnetic north.

Down-dip azimuths & dip angles were corrected for borehole deviation from vertical.

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| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 58.80                   | 172.1   | 58.1                               | less-open  |
| 59.60                   | 148.4   | 47.7                               | less-open  |
| 59.93                   | 168.2   | 48.7                               | less-open  |
| 60.08                   | 166.76  | 47.7                               | less-open  |
| 61.2                    | 134.08  | 49.41                              | less-open  |
| 61.36                   | 144.4   | 42.5                               | less-open  |
| 61.77                   | 150.6   | 53.5                               | less-open  |
| 61.95                   | 149.2   | 53.6                               | less-open  |
| 62.72                   | 285.5   | 65.8                               | less-open  |
| 63.12                   | 263.1   | 57.3                               | less-open  |
| 63.22                   | 126.99  | 67.86                              | less-open  |
| 64.71                   | 154.72  | 44.73                              | less-open  |
| 64.77                   | 298.4   | 66.0                               | less-open  |
| 65.31                   | 129.0   | 46.1                               | less-open  |
| 65.50                   | 302.3   | 63.7                               | less-open  |
| 65.87                   | 201.1   | 52.4                               | less-open  |
| 66.33                   | 218.7   | 28.6                               | less-open  |
| 66.60                   | 172.0   | 46.2                               | less-open  |
| 67.32                   | 139.3   | 40.0                               | less-open  |
| 67.70                   | 150.3   | 40.6                               | less-open  |
| 68.53                   | 351.6   | 4.7                                | less-open  |
| 69.58                   | 194.5   | 43.6                               | less-open  |
| 69.85                   | 158.6   | 46.8                               | less-open  |
| 70.08                   | 162.2   | 46.0                               | less-open  |
| 73.89                   | 324.2   | 62.2                               | open   |
| 75.33                   | 109.3   | 32.8                               | less-open  |
| 79.44                   | 135.7   | 35.3                               | less-open  |
| 81.07                   | 242.2   | 63.6                               | less-open  |
| 83.58                   | 114.4   | 45.7                               | less-open  |
| 83.71                   | 122.3   | 50.0                               | less-open  |
| 83.82                   | 112.7   | 48.3                               | less-open  |
| 84.06                   | 202.7   | 54.7                               | less-open  |
| 87.09                   | 166.2   | 42.2                               | less-open  |
| 87.31                   | 299.8   | 24.5                               | less-open  |
| 97.98                   | 183.8   | 42.7                               | less-open  |
| 100.46                  | 125.5   | 32.1                               | less-open  |
| 100.84                  | 328.4   | 48.8                               | less-open  |
| 103.13                  | 194.6   | 54.0                               | less-open  |
| 111.58                  | 287.9   | 49.2                               | less-open  |
| 111.82                  | 141.5   | 43.8                               | less-open  |
| 114.91                  | 146.0   | 52.9                               | less-open  |
| 116.19                  | 154.43  | 51.91                              | open   |
| 117.18                  | 116.62  | 61.61                              | less-open  |
| 119.45                  | 122.1   | 42.9                               | less-open  |

Fracture Orientations Interpreted from RW-1 Acoustic Televiewer Log  
Indian Point Site  
Buchanan, NY  
Prepared for: GZA  
105836 - rw1i.xls

| <b>depth<br/>(feet)</b> | <b>down-dip<br/>compass<br/>azimuth<br/>(degrees)</b> | <b>dip<br/>angle<br/>(degrees)</b> | <b>interpreted<br/>planar<br/>feature<br/>category</b> |
|-------------------------|---|------------------------------------|--|
| 120.34                  | 108.7   | 33.7                               | less-open  |
| 124.07                  | 229.6   | 30.8                               | less-open  |
| 127.11                  | 152.4   | 84.5                               | less-open  |
| 127.16                  | 182.4   | 41.8                               | less-open  |
| 129.71                  | 309.2   | 48.9                               | less-open  |
| 134.61                  | 284.5   | 46.5                               | less-open  |
| 135.67                  | 263.7   | 47.0                               | less-open  |
| 136.95                  | 322.0   | 43.0                               | less-open  |
| 137.89                  | 290.6   | 45.2                               | less-open  |
| 138.51                  | 293.1   | 43.1                               | less-open  |
| 138.64                  | 286.6   | 43.4                               | less-open  |
| 139.11                  | 273.7   | 27.2                               | less-open  |